GOODMANS TX-5000

MODEL

SERVICE MANUAL

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••••••• SPECIFICATION •••••••

GENERAL

Power requirement	: AC 110-240V~,50/60Hz (For M.East)
	: AC 230V~, 50Hz (For Others)
Power consumption	: Max. 19W (in REC mode)
Temperature	: 5°C~35°C (Operating)
	-20°C~60°C
Operating position	: Horizontal only
Dimensions (WxHxD)	: 360x90x288 (mm)
Weight	: Approx. 4.0Kg
Format	: VHS standard
Tape width	: 12.65mm
Tape speed	: (SP): 23.39mm/sec
	(LP): 11.70mm/sec
Maximum recording time with full-size cassette	: (SP): 240min. with E-240 video cassette
	(LP): 480min. with E-240 video cassette

VIDEO

Signal system	: PAL colour and CCIR monochrome signals, 625 lines/50 fields
	: NTSC colour and EIA monochrome signals, 525 lines/60 fields
Recording system	: Rotary two-head helical scan with a slant double-aximuth combination video head
Input	: 1.0Vp-p, 75ohms, unbalanced
Output	: 1.0Vp-p, 75ohms, unbalanced
Signal-to noise ratio	: 45dB (Rohde & Schwarz noise meter) with NETTETE IMAGE control at center position
Horizontal resolution	: 240 lines with NETTETE IMAGE control at center position

AUDIO

Recording system	: Longitudinal track
	: -8 dBm, (CENELEC standard), .. more than 47 k-ohms, unbalanced
Output	: -6dBm, (CENELEC standard), less than 1 k-ohm, unbalanced (100 k-ohms, load)
Frequency range	: 100 Hz to 8 KHz (Normal)
	: 20 Hz to 20 KHz (Hi-Fi)
Signal to noise ratio	: 38 dB More than (Normal)
	: 60 dB More than (Hi-Fi)
Audio Distortion	: Less than 3% SP (Normal)
	: Less than 0.5% (Hi-Fi)

TUNER

Tuning system	: Voltage synthesized tuner Programmable V/S 99CH (Hyper band)
RF Output	: UHF channel 22~69 52ch: For U.K & S/Ireland 60ch: For Others

TIMER

Memory programmable	: 99 CH
Back up time	: Less than 1 Hour
Clock exactness	: In accordance with the exactness of power supply frequency (50Hz)

ACCESSORIES

Provided Accessories	: Remote control unit, RF Cable, Battery

* Design and specification can be subjected to change without notice.

CHANNEL COVERAGE

SYSTEM	PAL/SECAM-BG/DK(B/G) 2 Carrier Sound system) NTSC-M
CHANNEL	VHF 2-12, VHF 21-69, CATV S1-S41, X,Y,Z (Hyperband)

IN/OUTPUT JACK TYPE

MODEL	Russia	Middle East
JACK TYPE	SCART Type	RCA JACK (PHONE JACK)

• Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

1. Insulation resistance test
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

2. Dielectric strength test
Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) See table below.

3. Clearance distance
When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metalic parts. See table below.

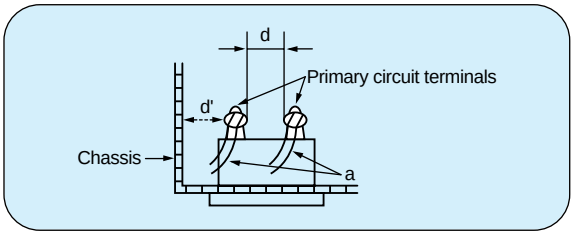


Fig. 1

Table 1: Rating for selected areas
* Class II model only.

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')
100V	Japan	≥ 1 MΩ/500 V DC	1kV 1 minute	≥ 3 mm
110 to 130V	USA & Canada	– – –	900V 1 minute	≥ 3.2mm
* 110 to 130 V 200 to 240 V	Europe Australia	≥ 10 MΩ/500 V DC	4 kV 1 minute	≥ 6 mm (d) ≥ 8 mm (d') (a: Power cord)

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

4. Leakage current test
Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.)

Measuring Method: (Power ON)
Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use and AC voltmeter to measure across both terminals of load Z. See figure and following table.

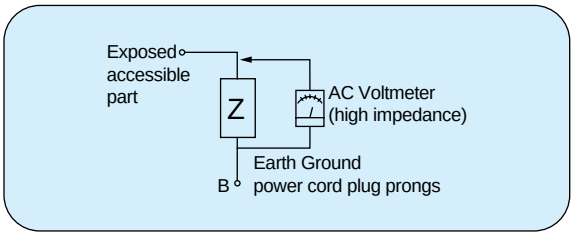


Fig. 2

Table 2: Leakage current ratings for selected areas
Note: This table unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to:
100V	Japan	1kΩ	¡ ≤ 1m A rms	Exposed accessible parts
110 to 130 V	USA & Canada	1.5kμF, 1.5kΩ	¡ ≤ 0.5 m A rms	Exposed accessible parts
110 to 130 V 200 to 240 V	Europe Australia	2kΩ	¡ ≤ 0.7 m A peak ¡ ≤ 2 m A dc	Antenna earth terminals
		50kΩ	¡ ≤ 0.7 m A peak ¡ ≤ 2 m A dc	Other terminals

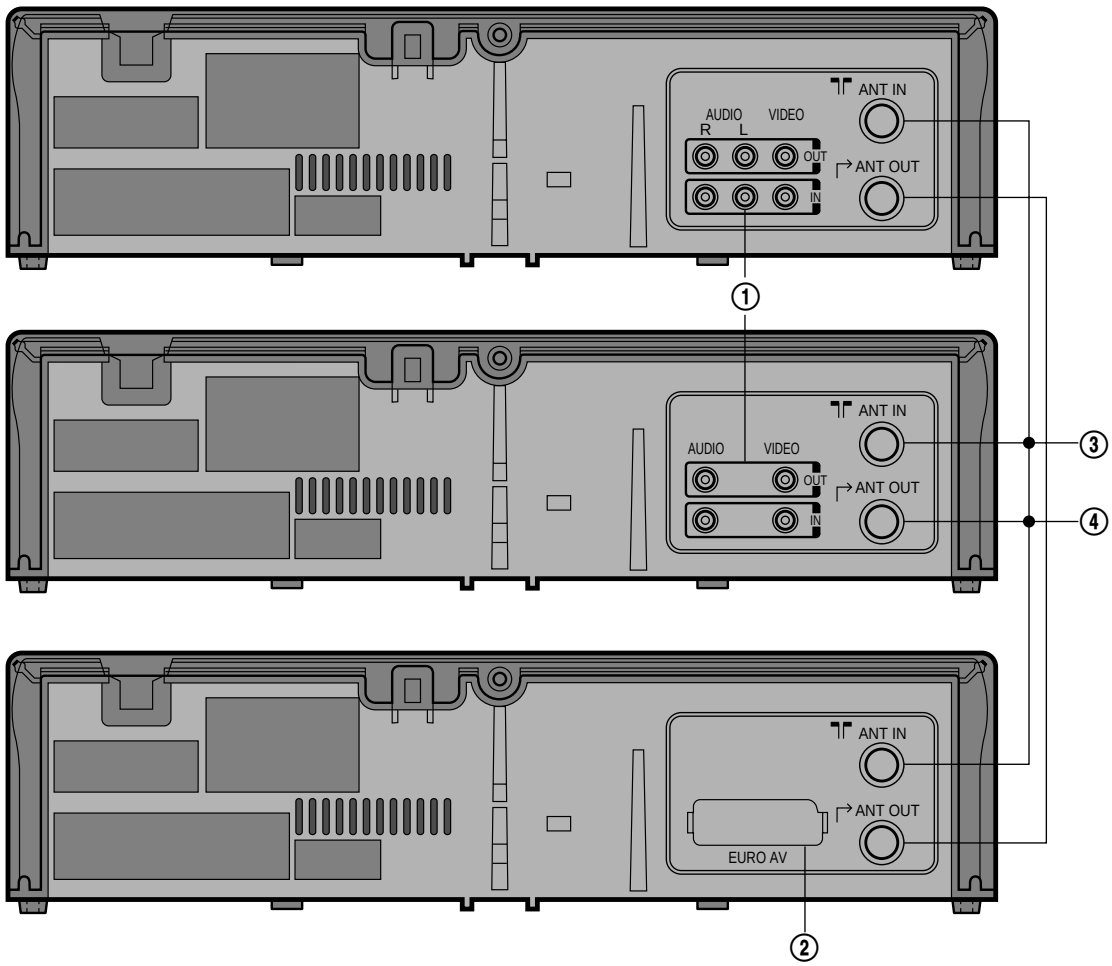
SECTION 1. CONTROLS AND FUNCTIONS

FRONT

¡ **NOTE:** The above front panel to DV-K884W. for conforms the other sets (machines), refer to page 80, 81, Front panel assembly.

① STAND BY
② STOP/EJECT
③ CHANNEL UP/DOWN SELECTION
④ PLAY BACK
⑤ REWIND/REVIEW
⑥ FAST FORWARD / CUE
⑦ RECORD / OTR (ONE TOUCH RECORDING)

REAR



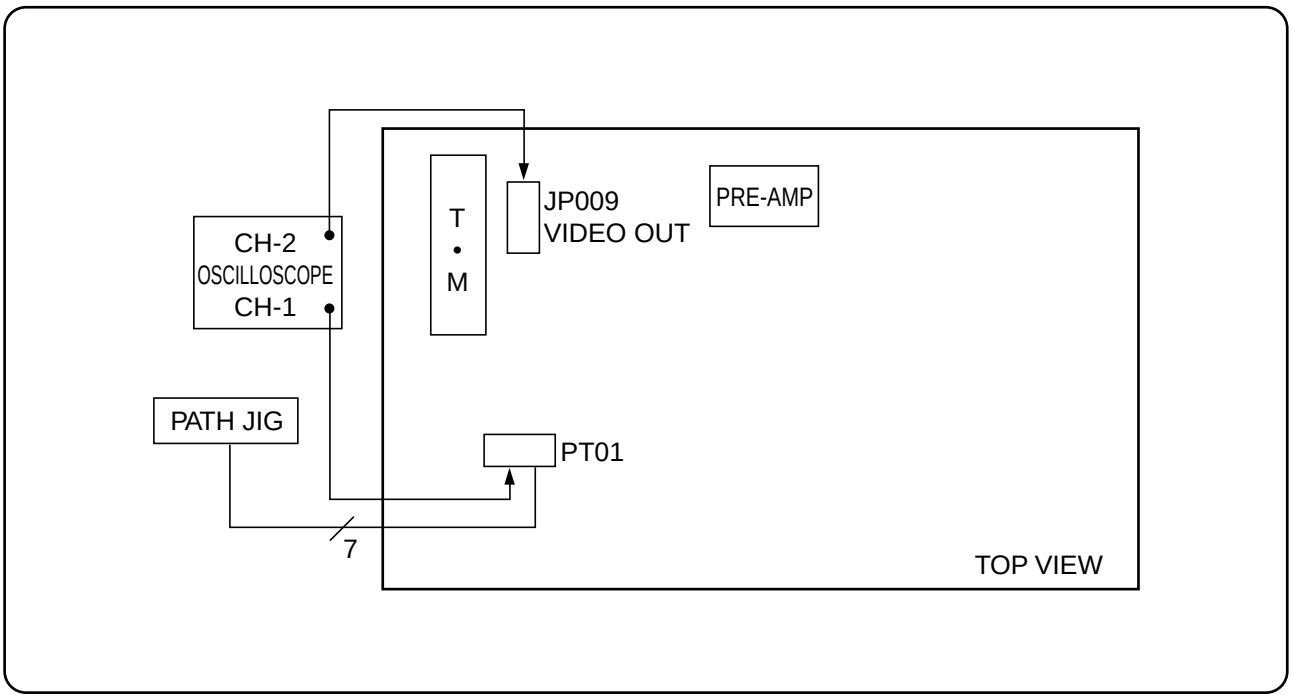
① AV IN/OUT SOKET (PHONE)
② EURO AV (AV IN/OUT)
③ ANTENNA INPUT TERMINAL
④ ANTENNA OUTPUT TERMINAL

2-1. SERVO CIRCUIT ADJUSTMENT METHOD

1. PLAYBACK PHASE

ADJUSTMENT PARTS	CHECKING POINT	MEASURING EQUIPMENT	MODE	TEST TAPE
Check	JP009 V.OUT PT01 PIN ④	Oscilloscope	Play	DP-2

• CONNECTION METHOD



• ADJUSTMENT PROCEDURE

1) Play back the test tape. (DP-2)
2) Set the oscilloscope to the CHOP mode. Connect CH1 to the SW PULSE (PIN ③ of PT01).
3) Insert PATH JIG and Press “REC” button on the remote control.
4) Check the position of the V-sync from the rising edge of the SW pulse.
   (Standard: 6.5H ± 0.5H)

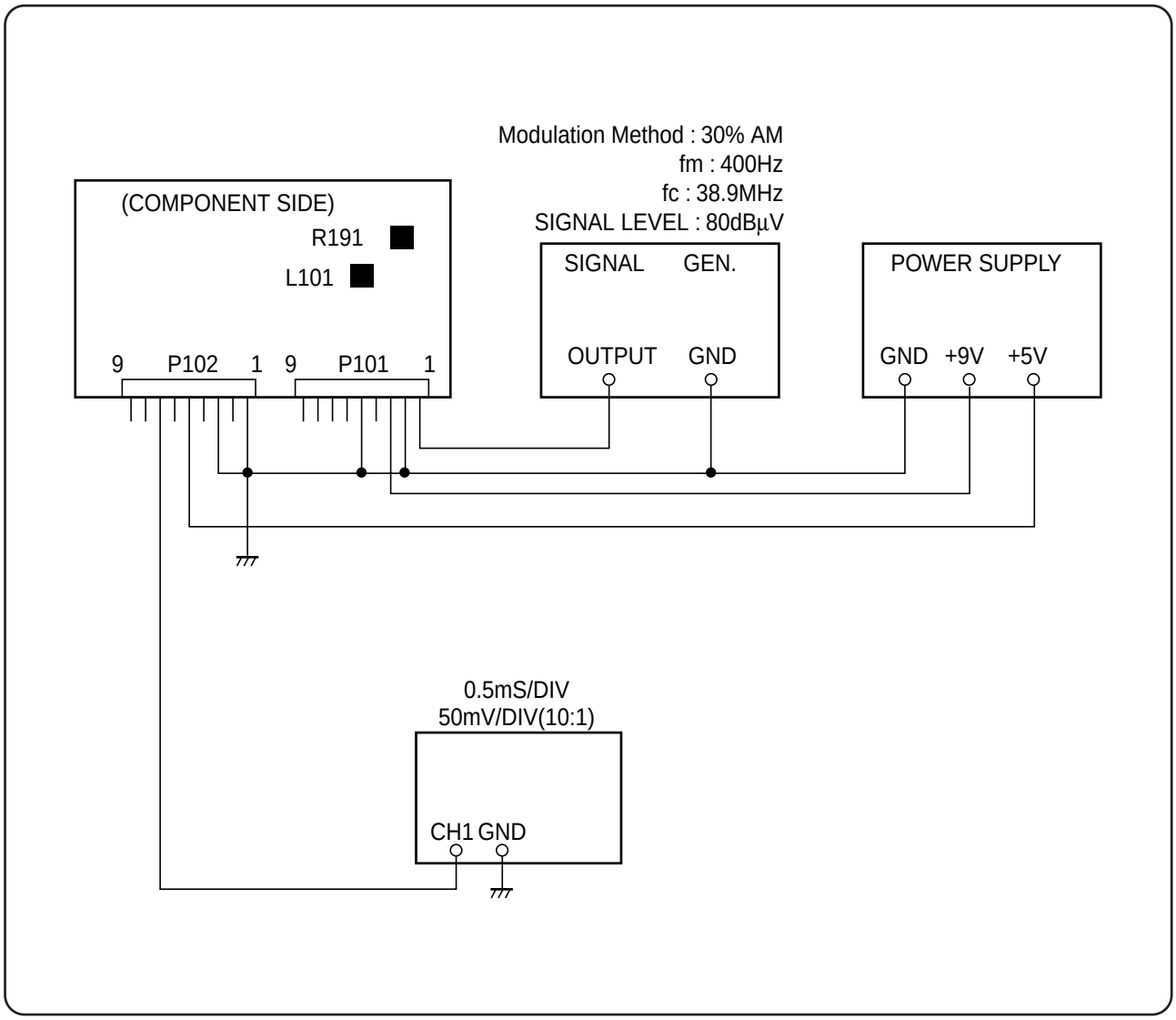
2-2. IF MODULE CIRCUIT ADJUSTMENT METHODS

1. AFT

ADJUSTMENT PARTS	CHECKING POINT	TEST EQUIPMENTS	INPUT SIGNAL
L101	P102 PIN ⑦	Signal Gen. Oscilloscope Power Supply	Refer to the following.

• AFT CONNECTION METHOD

IF MODULE PCB (TOP VIEW)



• ADJUSTMENT PROCEDURE

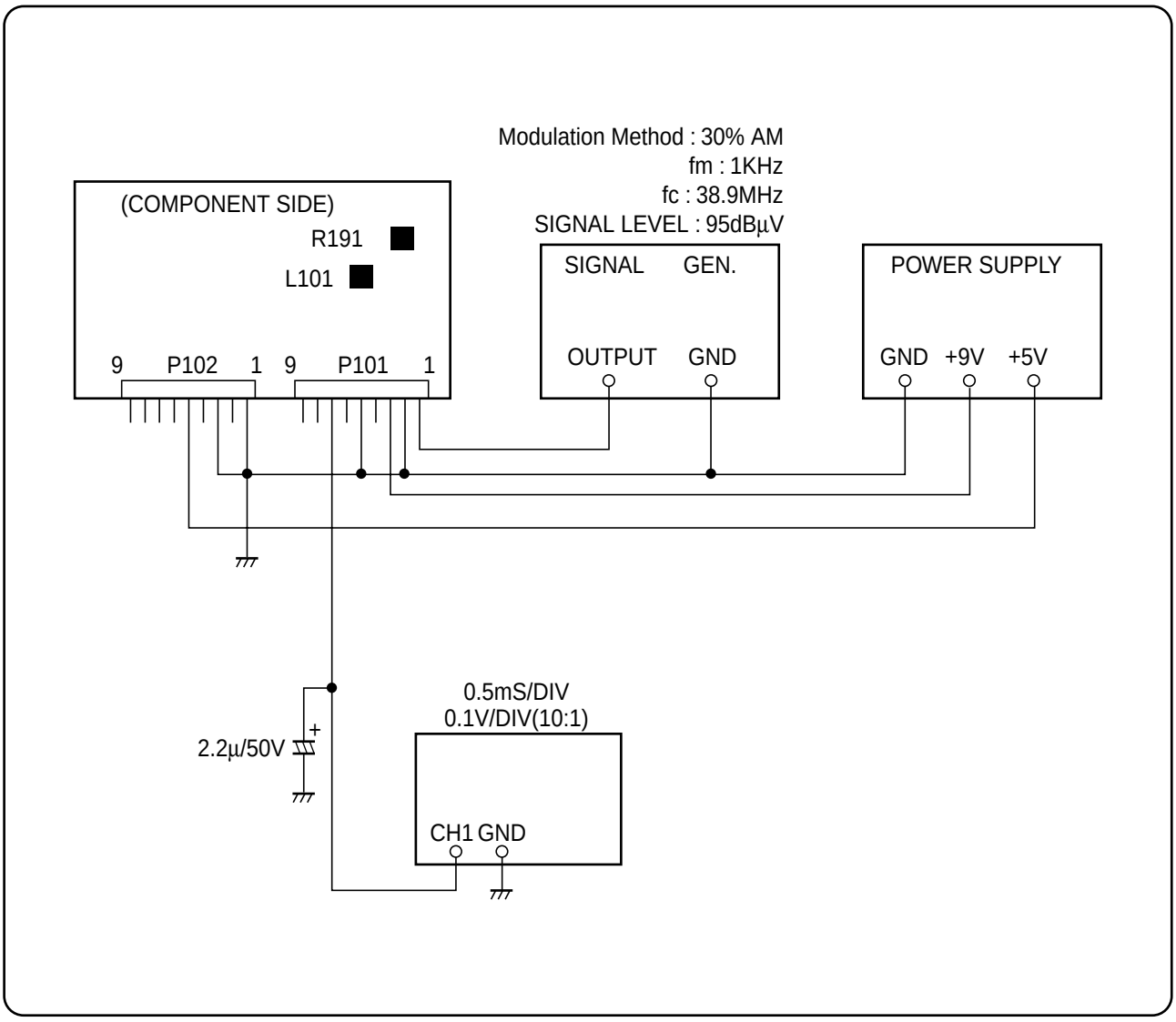
1) Connect the circuit as above connection diagram.
2) Set the each equipment setting as above description.
3) Adjust L101 to obtain 2.5 ± 0.15V DC Voltage at check point.

2. RF AGC

ADJUSTMENT PARTS	CHECKING POINT	TEST EQUIPMENTS	INPUT SIGNAL
L191	P101 PIN ⑦	Signal Gen. Oscilloscope Power Supply	Refer to the following.

• RF AGC CONNECTION METHOD

IF MODULE PCB (TOP VIEW)



• ADJUSTMENT PROCEDURE

1) Connect the circuit as above connection diagram.
2) Set the each equipment setting as above description.
3) Adjust R191 to obtain 6.0 ± 0.2V DC Voltage at check point.

SECTION 3. CIRCUIT OPERATION PRINCIPLES

3-1. POWER CIRCUIT

1. OUTLINE

The part that supply DV VOLTAGE to each circuit change AC input voltage into DC voltage. It is based on SMPS(switching mode power supply) system which is located on main PCB. SMPS module is composed of the switching circuit and the transformer of the primary part and the recitifier circuit of the secondary part.

2. NAME AND OPERATION OF PINS ON SMPS MODULE

1) Primary Part

PIN NO	NAME	FUNCTION
1	AC INPUT	SUPPLY AC INPUT VOLTAGE
2		

2) Secondary Part

PIN NO	NAME	FUNCTION
1	+37V	TURN VOLTAGE OF TUNER (33V)
2	(F+4.5V)	F/L DISPLAY FILAMENT VOLTAGE SUPPLY
3	(F-GND)	F/L DISPLAY DRIVE VOLTAGE SUPPLY
4	–27V	F/L DISPLAY DRIVE VOLTAGE SUPPLY
5	GND	SECONDARY GND
6	GND	SECONDARY GND
7	GND	SECONDARY GND
8	6V	EVER 5V, ON/OFF 5V
9	12.4V	CAP MOT, DRUM MOT (12V) LOADING MOT (12V)

3. GENERAL CIRCUIT OPERATION

The circuit shown is a highly accurate 37V, 12.4V, 6.0V, -27V, 4.5V, 20W secondary regulated flyback power supply that will operate from 85V to 265 VAC input voltage.
The input voltage is rectified and filtered by D801 and C1. L801, C801, C804 reduce conducted emissin current. C806, L801, C805 reduce common mode noises. R801 is ESD path resistor.
Voltage feedback is obtained from the transformer (T11) bias winding, which eliminates the need for optocoupler and secondary-referenced error amplifier. High-Voltage DC is applied to the primary-high-voltage DC is applied to the primary-winding of T11.
The other side of the transformer primary is driven by the integrated high-voltage MOS FET-transistor within the TOP225(IC11). The circuit operates at a switching frequency of 100KHz, set by the internal oscillator of the TOP (IC11). The clamp circuit impelemented by DZ11, D11, C17 and R13 limits the leading-edge voltage spike caused by transformer leakage inductance to a safe value.
The 37V power secondary winding is rectified by DC1, C25. The 12.4V power secondary winding is rectified and filtered by D24, C24. The 6.0V power secondary winding is rectified and filtered by D23, L22, C23. The -27V power secondary winding is rectified and filtered by DC2 and C22. The F(+) and F(–) power secondary winding is rectified and filtered by DC3, C21 and C29.
A IC21(KA431) shunt regulator directly senses and accurately regulates the output voltage. The effective output voltage can e file turned by adjusting the resistor divider formed by R24, R25 and R26. Other output voltages are possible by adjusting the transformer turns ratio.
The IC21(KA431) regulates the output voltage by controlling optocoupling LED current (and IC11 duty cycle) to maintain an average voltage of 2.5V at the IC21 input pin.
Divider R24, R25 and R26 determine the actual output voltage. C27, R27 rolls off the high frequency gain of the KA31 for stable operation.
R23 limits optocoupler LED current and determines high-frequency loop gain. SPFT start capacitor C26 increases optocoupler current turn-on to limit the duty cycle and down the risting output voltage. C26 has minimal effect on the control loop during normal operation. R22 dicharges soft start capacitor C26 when input power is removed.
The output of the T11 bias winding is rectified and filtered by D12, C11 and R11 to create a typical 12V bias voltage R12, R13 together with the control pin dynamic impedance and capacitor ESR establish a control loop pole-zero pair.
C13, R12 also determines the auto frequency and filters internal gate drive switching current.

3-2. KEY FEATURES OF VIDEO IC AND ITS RELATIVES

1. LA71501BM (QIP 80 PIN): NORMAL AUDIO & Y/C SIGNAL PROCESSING IC

1) Applicable to Multi system (PAL-GBI,MESECAM,3.58NTSC, 4.43NTSC and NAP-GBI)
2) Built-in NAP circuit to convert NTSC to PAL.
3) Normal audio signal processing circuit. (self-alignment for record bias)
4) Buit-in distinction SECAM signal circuit (MESECAM)
5) Built-in Record and Playback FM-EQ function (Switching the specific characteristic is possible by SERIAL CONTROL)
6) Y/C separation using comb filter
7) Built-in Input Switching circuit for 3 Video/Audio input
8) Using serial control by I^2 C-BUS
9) Complete Adjustment free
10) Crosstalk reduction by CCD IC for exclusive use (Color Comb filter is unnecessary)

2. LA70001(2CH),LA70011(4CH),LA70020(6CH): PRE-AMP IC

1) AGC circuit is built in this IC (no record current adjustment is required)
2) Built-in the playback signal ENVELOPMENT detection circuit for Auto tracking adjustment.

3. LC89978M: MULTI CCD DELAY LINE IC

1) Built-in Comb Filter for color noise reduction
2) Built-in 1H Delay Line for luminance circuit

3-3. RECORD AND PLAYBACK PROCESSING CIRCUIT

1. RECORD PROCESSING

The video input signal is selected by AV 1CHIP switching IC among EXT VIDEO INPUT(28pin), LINE VIDEO INPUT(32pin) and IF VIDEO INPUT(30pin), is supplied to the 35th pin of AV 1CHIP IC.

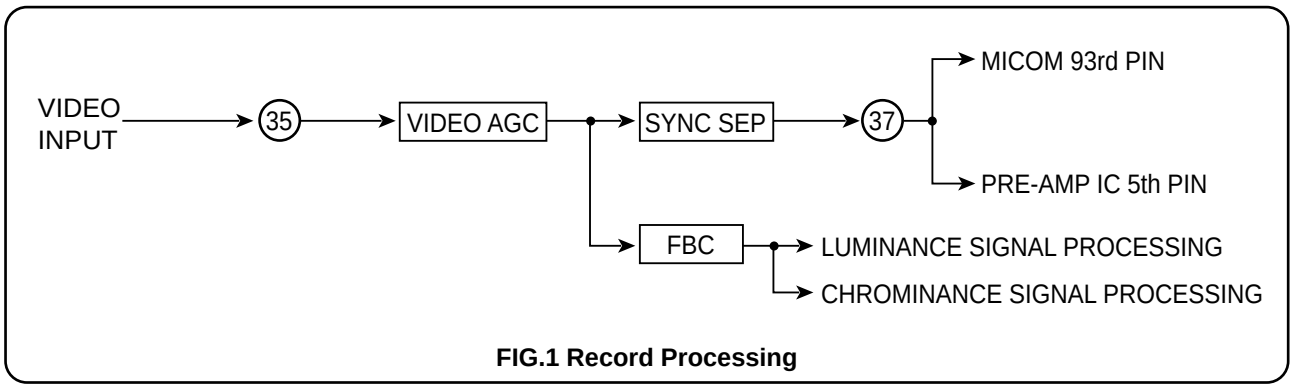


FIG.1 Record Processing

The input video signal is then automatically adjusted to suitale level by the built-in VIDEO AGC circuit and supplied to SYNC separation and FBC(feedback clamp) part respectively .
SYNC signal is obtained from the composite video signal ,is supplied to the 93rd pin of MICOM and the 11th pin of PRE-AMP IC to determine the presence of signal ,selection of PAL/NTSC and is using for SERVO control,
In PRE-AMP, is using for the HEAD-AMP switching timing and AGC circuit for self-adjustment of the record bias.
The input signal through FBC is processed in luminance signal processing part and chrominance signal processing part independently.

¡ **NOTE:** Pre-Amp IC varies according to the types of machines. We conform to 4HD's standard.

1)LUMINANCE SIGNAL PROCESSING (RECORD)

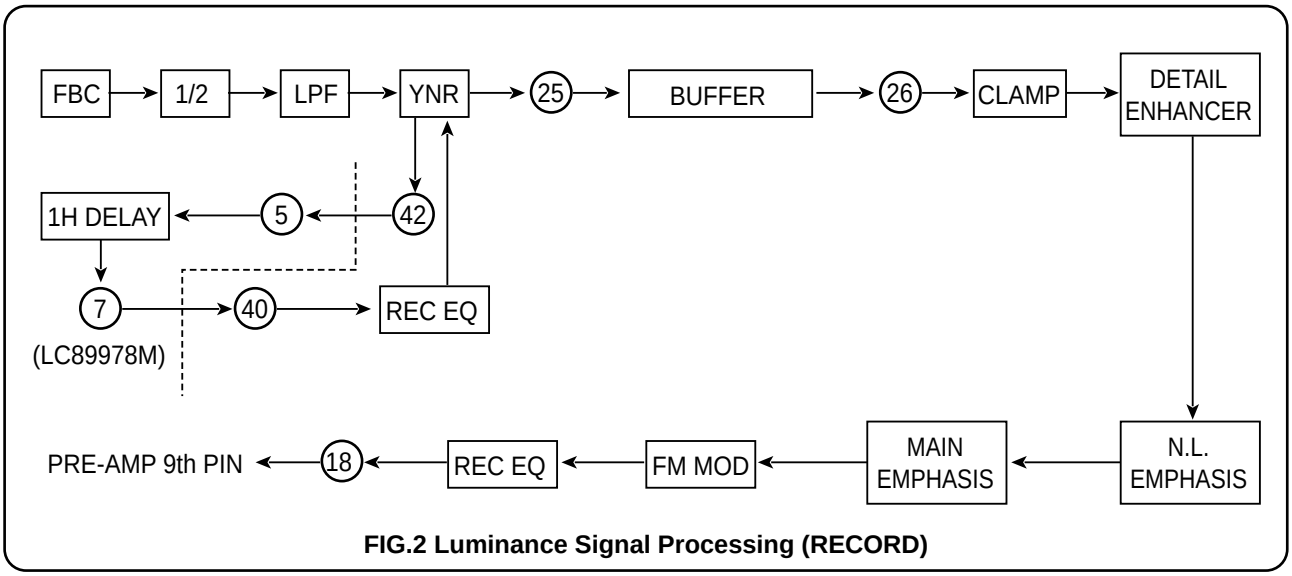


FIG.2 Luminance Signal Processing (RECORD)

The input signal through FBC is reduced 6dB of its level and then the pure luminance signal is obtained by LOW-PASS FILTER.
In YNR(Luminance Noise Reduction) circuit,the noise is eliminated using the original signal and 1H delayed signal.
The detail enhancer enhances overall high-frequency response, so an object with fine lines can be seen more clearly during playback.
The nonliner Emphasis and Main Emphasis can minimize the triangular noise susceptible to frequency modulation.
The FM-modulated luminance signal is supplied to PRE-AMP through RECORD EQ for compensating the high frequency response related to HEAD characteristic, where it RECORD EQ characteristic is determined by LSB 1-4bits of Group 4.

2)CHRONOMINANCE SIGNAL PROCESSING (RECORD)

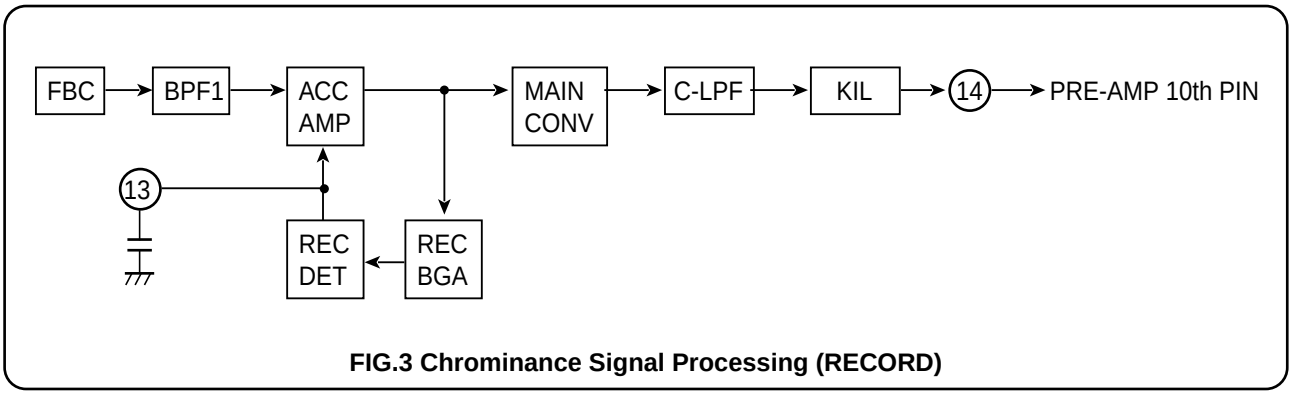


FIG.3 Chrominance Signal Processing (RECORD)

The pure chrominance signal is obtained by BPF1(f_{SC} :4.43MHz or 3.58MHz) through FBC then is supplied to ACC AMP.
The gain of ACC AMP is controlled by DC voltage at 13th pin.
The ACC AMP OUTPUT is input to MAIN CONVERTER and the main converter down-converts the chromiance signal to 627 or 629KHz.
The down-converted signal is again filtered by the COLOR LOW PASS FILTER, so the pure chrominance components is maintained.
Meanwhile, the burst level of the ACC AMP output signal is detected by the burst gate and it determines the activation of color killer.
The final signal through color killer is supplied to PRE-AMP IC10th pin after passing 14th pin.

2. PLAYBACK PROCESSING

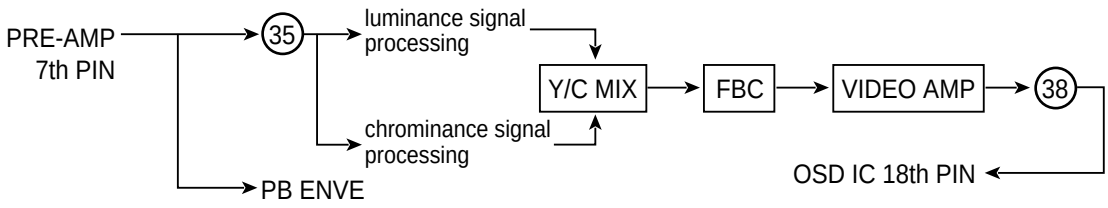


FIG.4 Playback Processing

The playback ENVE signal from PRE-AMP is supplied to 15th pin of A/V IC for processing the PAL luminance and chrominance.
The output signal through Y/C MIX after each processing of chrominance and luminace is supplied to the 18th pin of OSC IC through 38th pin.

1)LUMINANCE SIGNAL PROCESSING (PLAYBACK)

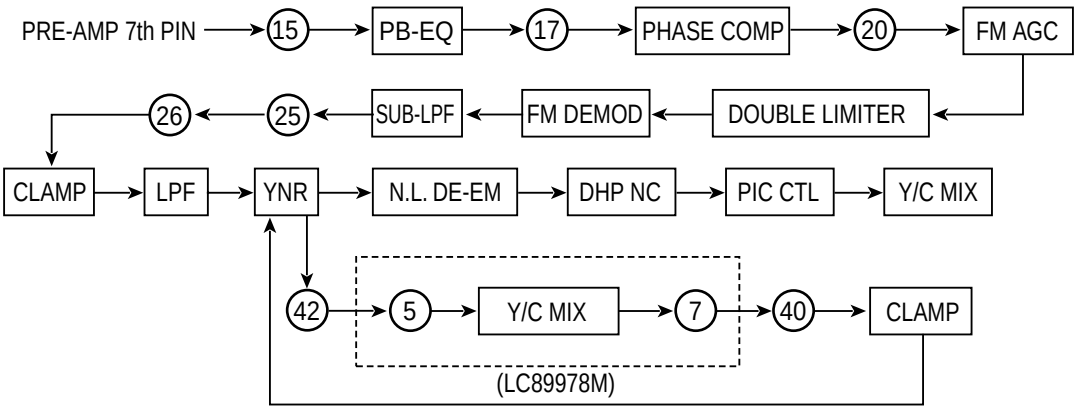


FIG.5 Luminance Signal Processing (PB)

The ENVE signal is equalized by the PB-EQ, which flatterns the whole frequency characteristic.
PB-EQ is controlled by SERIAL CONTROL and determined by the GROUP 6, 6-8bits.
The PULSE characteristic is improved by passing the phase compensation circuit.
Double Limiter restores the high frequency portion and elimiantes the SPIKE NOISE and AM components.
The FM modulated signal which is recorded is demodulated and then the RECORD NONLINER EMPHASIS characteristic is compensated by DE-EMPAHASIS through YNR.
Double High Pass Noise Canceller eliminates the high frquency noise against playback signal.
The picture control circuit improves the picture sharpness,while picture control is determined by 1-4bits of Group 8 on controlling the SERIAL.

2)CHROMINANCE SIGNAL PROCESSING (PB)

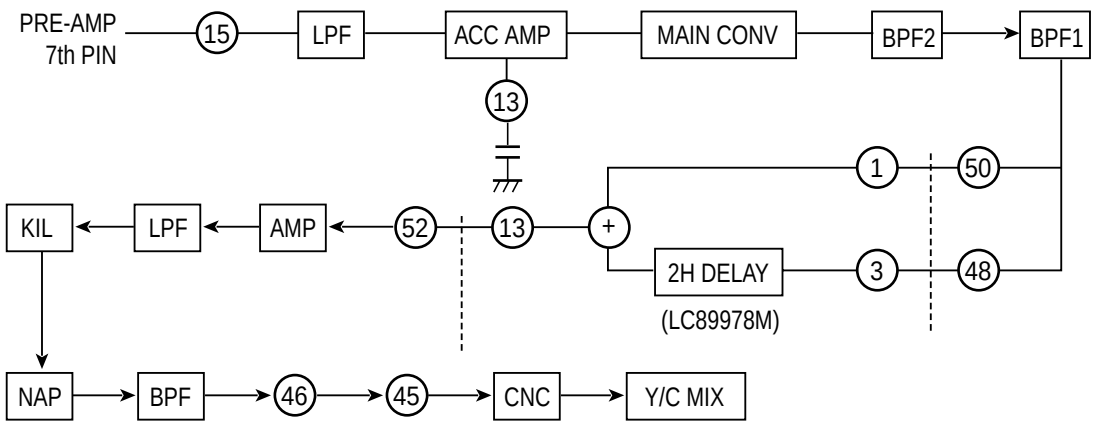
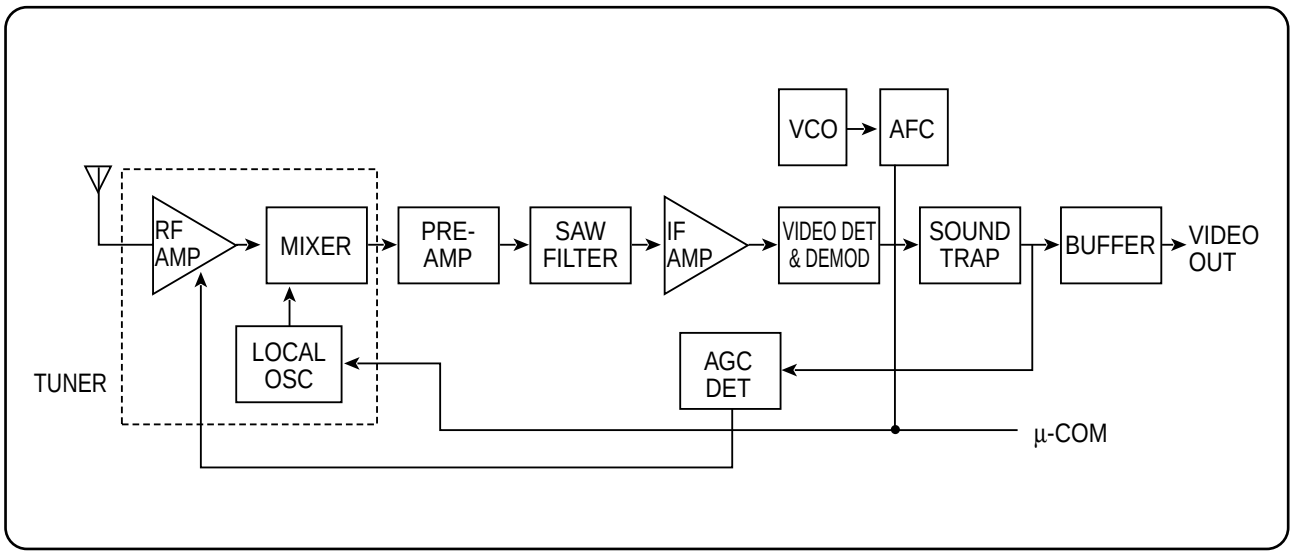


FIG.6 Chrominance Signal Processing (PB)

The down converted chrominance PAL-COLOR signal is obtained by LPF from PB ENVE.
And then the signal is up-converted to 4.43MHz or 3.58MHz by the MAIN CONVERTER.
The redundant harmonice is filtered out by the BPF, and then the signal is applyed to the CCD IC to reduce the chrominance crosstalk.
The NTSC PLAYBACK is possible on PAL/SECAM SYSTEM by the NAP circuit, the activation of which is determined by 7-8bits of GROUP 7 on controlling the SERIAL.
The signal is mixed with the Y/C after passing the Color Noise Canceller circuit.

3-4. IF CIRCUIT OPERATION

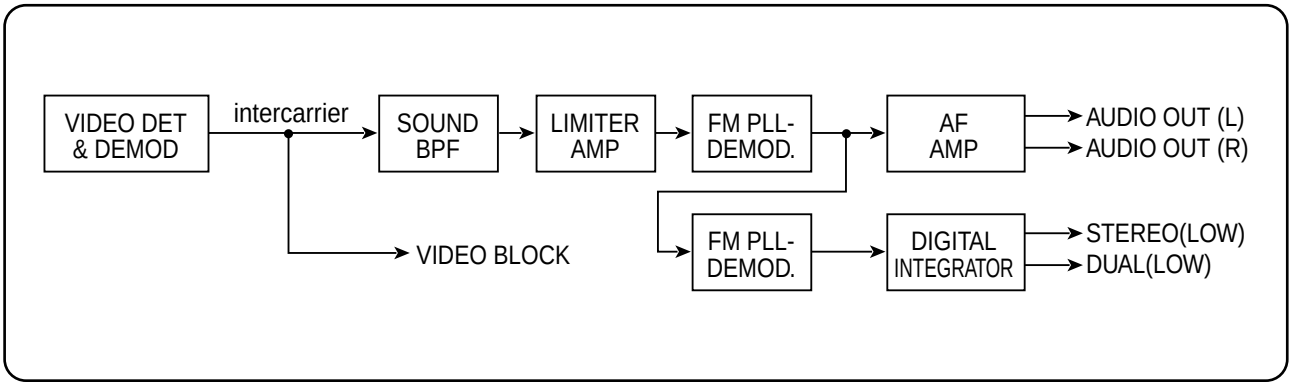
1. VIDEO SIGNAL FLOW



The signal from the ANT is amplified for selectivity, to decrease image interference, and increase S/N using the RF AMP. The RF signal at the MIXER is subtracted from the LOCAL OSC frequency using the upperside band method, to change is into the IF signal; 38.9MHz. The IF signal converted from the RF signal in the tuner block is amplified by about 28dB to increase S/N in the pre-amp block. The reason for thesis that the SAW filter has its own insertion loss of about-18 to -22dB. The SAW filter is a kind of BPF, used to remove the near channel harmonics and make the desired frequency response. The IF AMP desired of about 60 to 70dB gain for receiver sensitivity and selectivity. The vision IF AMP consists of three AC-coupled differential amplifier stages; each stage uses a controlled feedback network called AGC. To maintain the video output signal at a constant level the automatic control voltage is generated according to the transmission standard. For negative modulation in the PAL standard the peak-sync level is detected. The AGC detector charges and discharges the AGC capacitor to set the IF gain and the tuner gain. We can also adjust the tuner AGC voltage take over point. This allow the tuner and the IF SAW filter to be matched to achieve the optimum IF input signal. The IF amplifier output signal is fed to a frequency detector and to a phase detector. The frequency detector is operational before lock-in. A DC current is generated which is proportional to the frequency difference between the input signal and the VCO frequency. The control voltage for the VCO is provided by the phase detector. The demodulate output signal is fed via an integrated LPF (about 12MHz) to the video amplifier for suppression of the carrier harmonics.

The VCO operates with a symmetrically-connected reference L-C circuit, running at the double vision carrier frequency (77.8MHz) to decrease the frequency error. Fequency control is performed by an internal varicap diode. The voltage used to set the VCO frequency to the actual double vision carrier frequency, is also amplified and converted to give the AFC output current. The AFC output is fed to the µ-COM to change the LOCAL OSC frequency and for channel searching. The VCO signal is divided by-two in a travelling wave divider, which generates two differenctial output signals with exactly 90 degrees phase difference, independent of frequency. The video signal passing through the 5.5MHz sound trap is fed to the buffer.

2. PAL AUDIO FLOW (Two carrier) (Hi-Fi only model)



The FM sound intercarrier signal passing through the 5.5MHz/5.74MHz (DK: 6.5MHz) sound BPF is fed to a limiter amplifier before it is demodulate. This gives high sensitivity and AM suppression. The limiter amplifier consists of seven internal AC-coupled stages, minimizing the DC offset. The FM-PLL demodulator consists of an RC-oscillator, loop filter and phase detector. The oscillator frequency is locked on to the FM intercarrier signal from the limiter amplifier. As a result of this locking, the RC-oscillator is frequency modulated. The modulating signal voltage is used to control the oscillator frequency using this technique, the FM-PLL works as a FM demodulator. The audio signal(AF1: L+R/2, AF2:R+pilot(AM)) passing through the stereo/dual sound processor. Its identification ensures safe operation by using internal digital PLL technique with extremely small bandwidth, synchronous detection and digital integration(switching the maximum 2.6s; identification concerning the main functions).
The audio signal(L, R) is amplified and coming out of the stereo/digital sound processor.

4. TM BLOCK

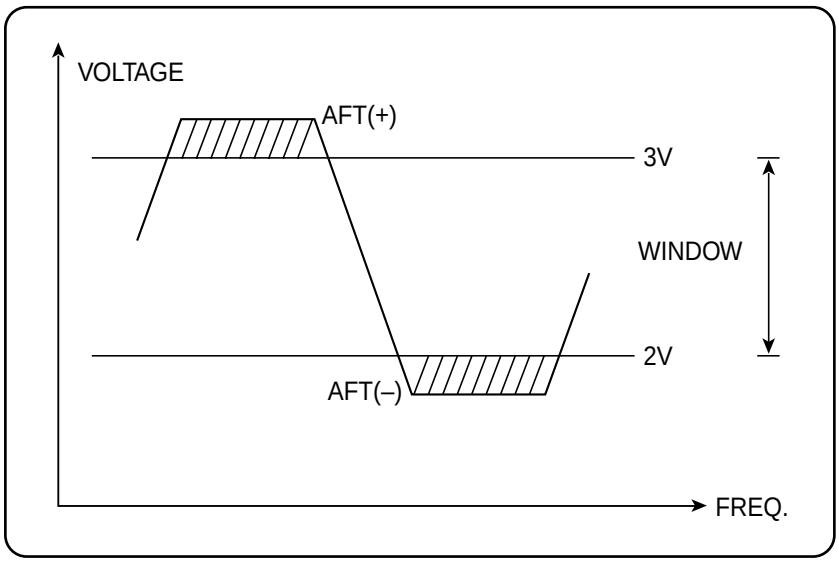
The TUNER and MODULATOR which is separated to each module conventionally, is presently united to one block (TM block)

(a) PLL METHOD AND I²C-BUS CONTROL

The RF OUTPUT channel can be varied from 22CH to 69CH by remote control using PLL method and I²C-BUS control.
Moreover, SYSTEM(PAL, MESECAM, NTSC), SOUND CARRIER FREQUENCY, AND TPSG(TEST PATTERN SIGNAL GENERATOR) can be changed by remote conrol as well.
The P/S ration, white clip, power saving, etc., also can be controlled only by changing a I²C-BUS data according to the designer's intention.

(b) DIGITAL AFT METHOD

Conventionally, when the frequency deviates, the variation of AFT output from IF circuit was compensated by feedbacking it to TUNER AFT input.
On the other hand, if AFT, which is currently adopted to these models from IF circuit deviates the window range, the VT value is changed to maintain the AFT voltage to be within window range by checking AFT(+) and AFT(–) on MICOM.



3-5. NORMAL AUDIO SIGNAL PROCESSING(LA71501BM)

The circuitry of Normal AUDIO part is similar to that of the conventional Normal AUDIO part in case of EE and PB mode, but in REC mode, due to the internal opeation of self-alignment, it shows a lot of differences.

1. EE MODE

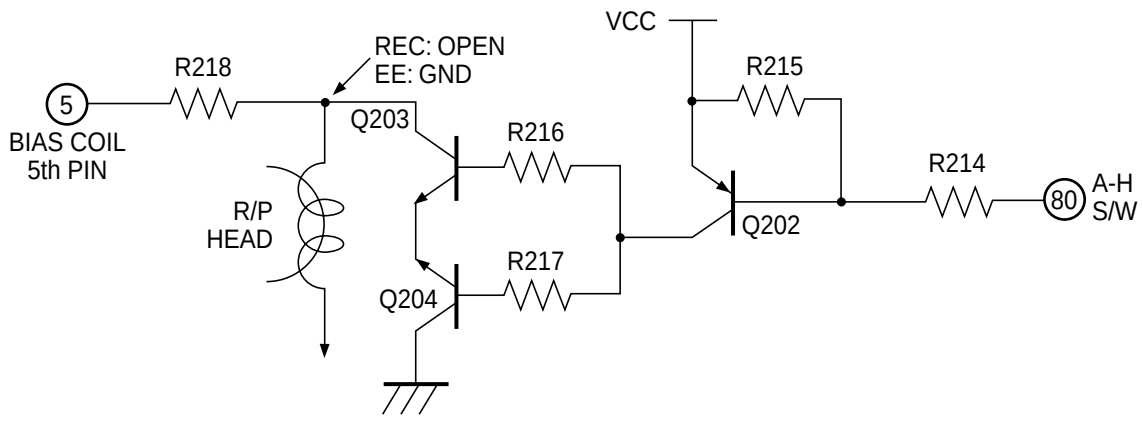
LA71501BM has 3-input VIDEO/AUDIO switching circuitry internally, and its switching is controlled by the serial data dispatched from MICOM.
In the case of Hi-Fi models, only One input is used. The Normal AUDIO signal from Hi-Fi Audio part is divided by the resistor, R202 and R203 and then supplied to the 73rd pin of LA71501BM. Its level is automatically controlled by ALC and then the amplified signal through LINE AMP is obtained at the 77th pin.
The signal from C208 is supplied to REC AMP after the divider circuit (R204, R205, R207) and also to the Hi-Fi IC BH7804K.
The ALC point can be adjusted by R208 and R209, the adjustment of which is closely related to the REC level in REC mode.
The ALC time can be adjusted by R201 and C201.
At the MONO model, 3 input VIDEO/AUDIO switching circuit (Internal IC) is fully used. IF audio signal is supplied to pin 71, AV signal to pin 73. Additionally F/AV signal is not used. Afterwards, Mono model is the two input system.

2. PB MODE

The PB signal picked up from AUDIO HEAD is firstly processed in the frequency characteristic compensator which is composed of R220 and C214 (EP: C214+C215) and then supplied to the 7th pin.
The input signal passes through EQ AMP, and LINE AMP, so its output signal is finally obtained from the 77th pin.
The circuitry and its operation of EQ AMP is identical to the conventional EQ AMP.

3. REC MODE

1) AUDIO SWITCHING CIRCUIT
When the AUDIO S/W signal at the 80th pin is “H”, the point at the AUDIO HEAD of the external switching circuit is opened electrically (EE/PB=GND), so the COIL starts to oscillated.



External Switching Circuit

2) As long as the voltage difference between VCC and the 5th pn is maintained at 2.0~4.3V, the COIL oscillates. In oher words, the COUL maintains to oscillate only if the voltage at the 5th pin is 0.7~30Vp-p.
Especially, when the R/P and FE HEAD impedance is at the center, the voltage at the 5th pin should be maintained at 1.85Vp-p, and, if not, when the HEAD impedance is MAX or MIN, the voltage at the 5th pin is liable to deviate the ranges of 0.7~3.0Vp-p.
The higher the FE HEAD impedance is or the lower the R/P HEAD impedance is, the higher the voltage at the 5th pin increases.
The AC signal is put on the DC voltage at the 5th pin, and it shows the internal AUTO BIASing.
The control signal at the 6th pin controls the TR(Q205) to ON/OFF, by which the AUTO BIASing is controlled.

3) The output AUDIO signal at the 1st pin through REC AMP is recorded on HEAD after being mixed with the 70KHz AC BIAS signal.
   At the same time, the output AUDIO signal is supplied to the 3rd pin and then filtered by 60KHz HPF, so only the 70KHz AC BIAS signal is passed.
   The pure 70KHz AC BIAS signal is then compared to the voltage of 440mV at the comparator, so the AC BIAS signal is controlled to maintain at 440mV.
4) The recording current is determined by the 440mVrms BIAS signal and the resistance between the 1st and the 3rd pin.

* The method to set the recording current.
  BIAS=440mVrms ÷ the resistance between the 1st and the 3rd pin.
  ex) 440mVrms ÷ 1.8K OHM = 244μA

where, only the low error, G type resistor should be used here.
As a rule of thumb, the resistance between the 1st and the 3rd pin should range from 1.0 ohm to 2.2K ohm.

5) The conventional AUDIO circuitry uses a peaking COIL to enhance the high frequency region, but the LA71511M uses the resistance of R/P HEAD.
   Accordingly, The resistor and the capacitor is used to fit the frequency characteristics.

4. BIAS COIL

For normal operation of AUTO BIAS, the oscillating voltage of R/P HEAD is over 40Vp-p, A/E HEAD is over 20Vp-p, and the FE HEAD is over 40Vp-p.
Especially, the erasing current of F/E HEAD ranges from 130 to 280mA, and it should be 180mA when the HEAD impedance is at the center.

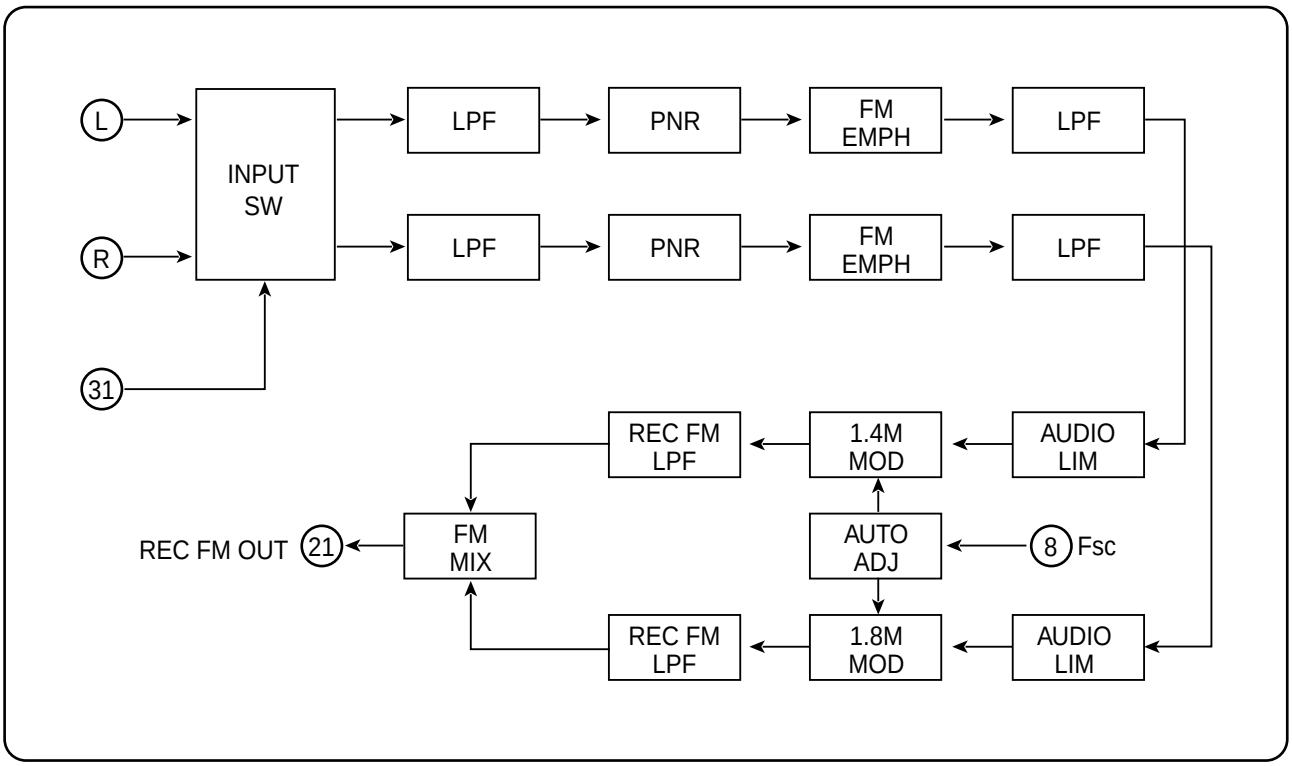
3-6. HI-FI AUDIO SIGNAL PROCESSING (BH7804K)

1. SPECIAL FEATURES

BH7804K processes the conventional Hi-Fi audio and additionally, contains special parts as the below.

(1) As ± 2 power source formula is adapted, decrease of coupling capacitor is possible the REGULATOR circuit is built in.
(2) Built in I^2C bus control decoder circuit which has two lines formula, each mode for the inside of IC is set up by serial data.
(3) Reverse characteristics system during recording and playback are used in both the PNR (Peak Noise Reduction) processor and FM MODEM. And it can be simultaneous adjustment of carrier frequency and FM deviation/playback level. And it can be independent adjustment of FM deviation/playback level. (The adjustment of Lch and Rch is simultaneous.)
(4) Slope control FM switching noise correction circuit is built in.
(5) Auto adjust circuit of VCO and BPF making use of Fsc (3.58MHz) is built in. It is possible to adjust changelessly without drift by board mounting stress and time.

2. REC MODE



(1) Signal Flow

In this system, the input signal sources are contained with IF, AV and F.AV. each pin number's decription is the same as the below.

INPUT / CH	IF	AV	F.AV
L	2	41	34
R	1	40	33

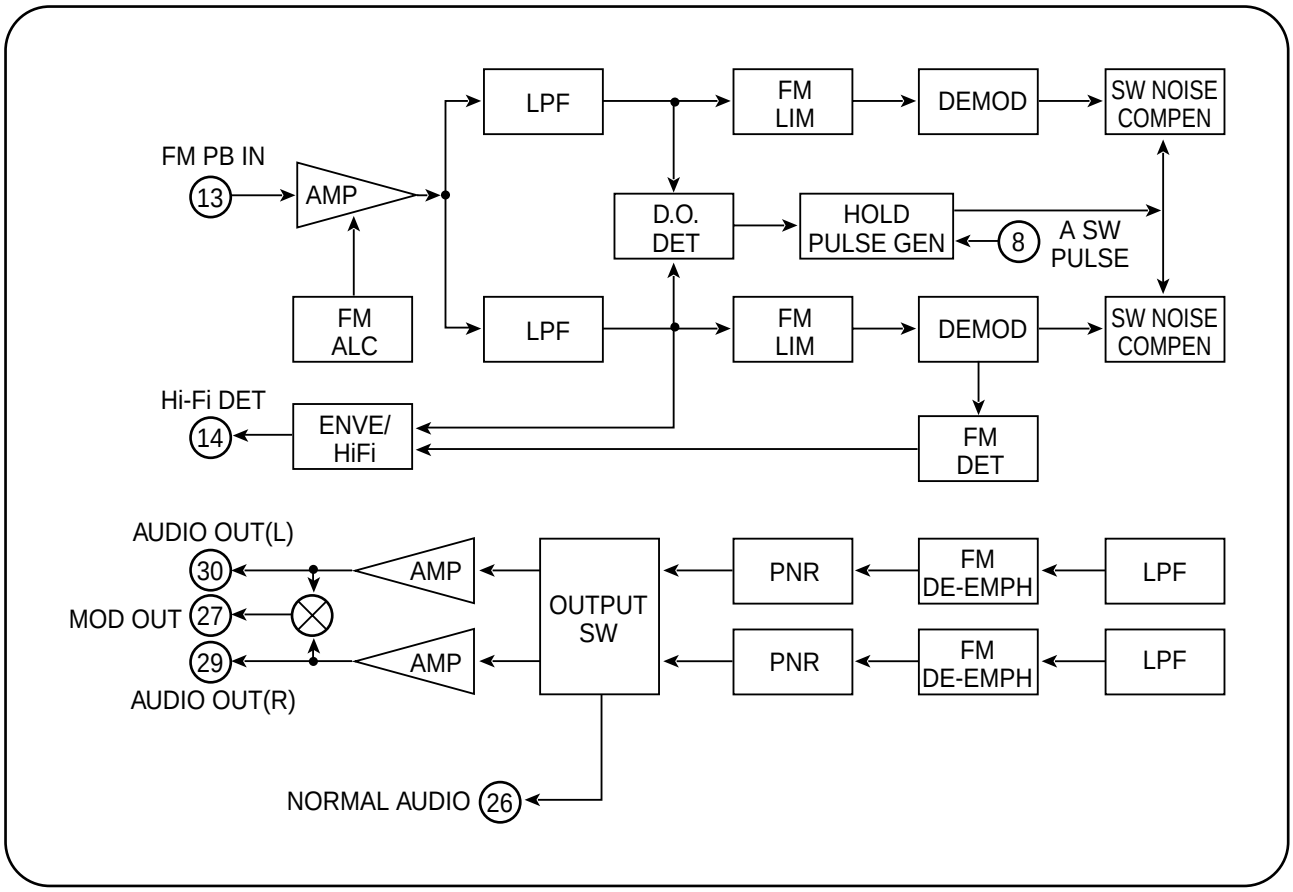
The input signals, selected by the input siwthcer, go through the LPF (at 20KHz) and PNR processor. Additionally, the selected input signals are supplied to the Normal Audio Unit-Pin 31st. The Normal Audio cab be mixed with the L+R-Stereo mode, or can be selected with L only-Bilingual mode. The PNR processor compresses the audio signal in order to reduce the audio noise and enlarge the Dynamic Range.

The FM EMPH(FM Emphasis) emphasiszes the higher band of signal. It can restrict the FM back-noise, when the signal is demodulated. The modified audio signal is modulated by the Modulator unit. It is composed of AUDIO LIM(Limitter), 1.4MHz & 1.8MHz (NTSC Case: 1.3MHz & 1.7MHz) modulator. The Audio limiter cuts the level of signal to avoid the overmodulation, and then the limitted signal is modulated with two carriers-1.4MHz : Left Ch, 1.8MHz : Right Ch. The modulated two signals are mixed by the FM MIX unit. The mix ratio of FM L and R can be adjusted with the software-refer to the service mode. Finally, REC FM signal put out to the Pin 21st. It is supplied to the Hi-Fi preamp.

(2) Auto Adjustment of the VCO, BPF

In this IC, the FM carrier frequency and BPF are adjusted by the synthesized PLL VCO (Phase Locked Loop Voltage Control) unit. The Auto adjustment is executed at POWER ON, as using the Fsc-3.58MHz. The Fsc is supplied from the OSC for Color Sub-carrier in the Video unit. If the adjustment completes successfully, IC's pin 14th is set the "HIGH" state-5V. Otherwise "LOW" state-0V. The adjustment of VCO, BPF occurs simultaneouslly.

3. PB MODE



(1) Signal Flow

FM signal input to the Pin 13rd is amplified, and ditributed to the two BPFs-1.4MHz and 1.8MHz (NTSC Case: 1.3MHz & 1.7MHz). The band passed FM signals are supplied to the De-Modulator unit. First, the FM LIM confines the FM to the limitted level, and then the signals are demodulated. The converted audio signals are compensated by the SW NOISE COMPEN. The signals are passed by the LPF, and de-emphasized by the FM DE-EMPH in order to restrict the FM back-noise. The PNR processor expands the signals and reduces the audio noise.

The two Line AMPs amplifiy the audio level, and supply to the Audio Out Pin 30th, 29th. The Mod out Pin 27th is and mixed audio output port for the RF-modlator. The Output SW is available to select the audio output of Left+Right (Stereo), Left only, Right only and Normal Audio. The Pin 26th is the input port for Normal audio.

(2) Noise Compensation and Hi-Fi Detect

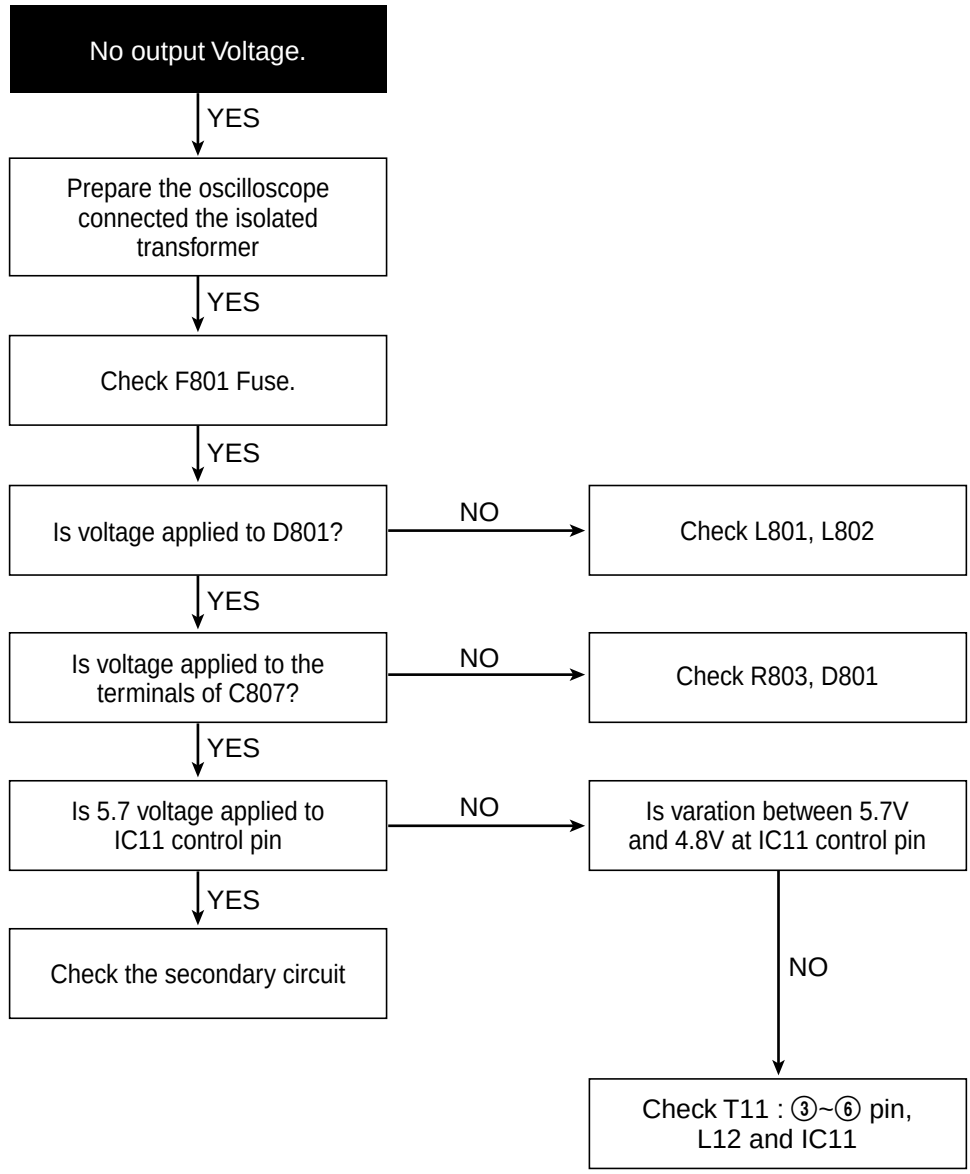
In the Hi-Fi audio system, the noise trouble occurs, when the FM signal is defective. The defection of FM signal is due to the Drop Out which is scratched on the surface of tape, and the audio SW noise. If the D.O.DET detects the Drop Out of FM signal, it requires the HOLD PULSE GEN to generate the hold pulse, and then compensate the noise. And the HOLD PULSE GEN generates the regular pulse by the Audio SW pulses, then send the control signal to the SW NOISE COMPEN which compensates the noise.

The ENVE/HiFi discreminates the Hi-Fi audio from the Normal audio. If the envelope of FM Hi-Fi exists, “High”-5V-control signal is out to the Pin 14th. Otherwise Control voltage is 0.

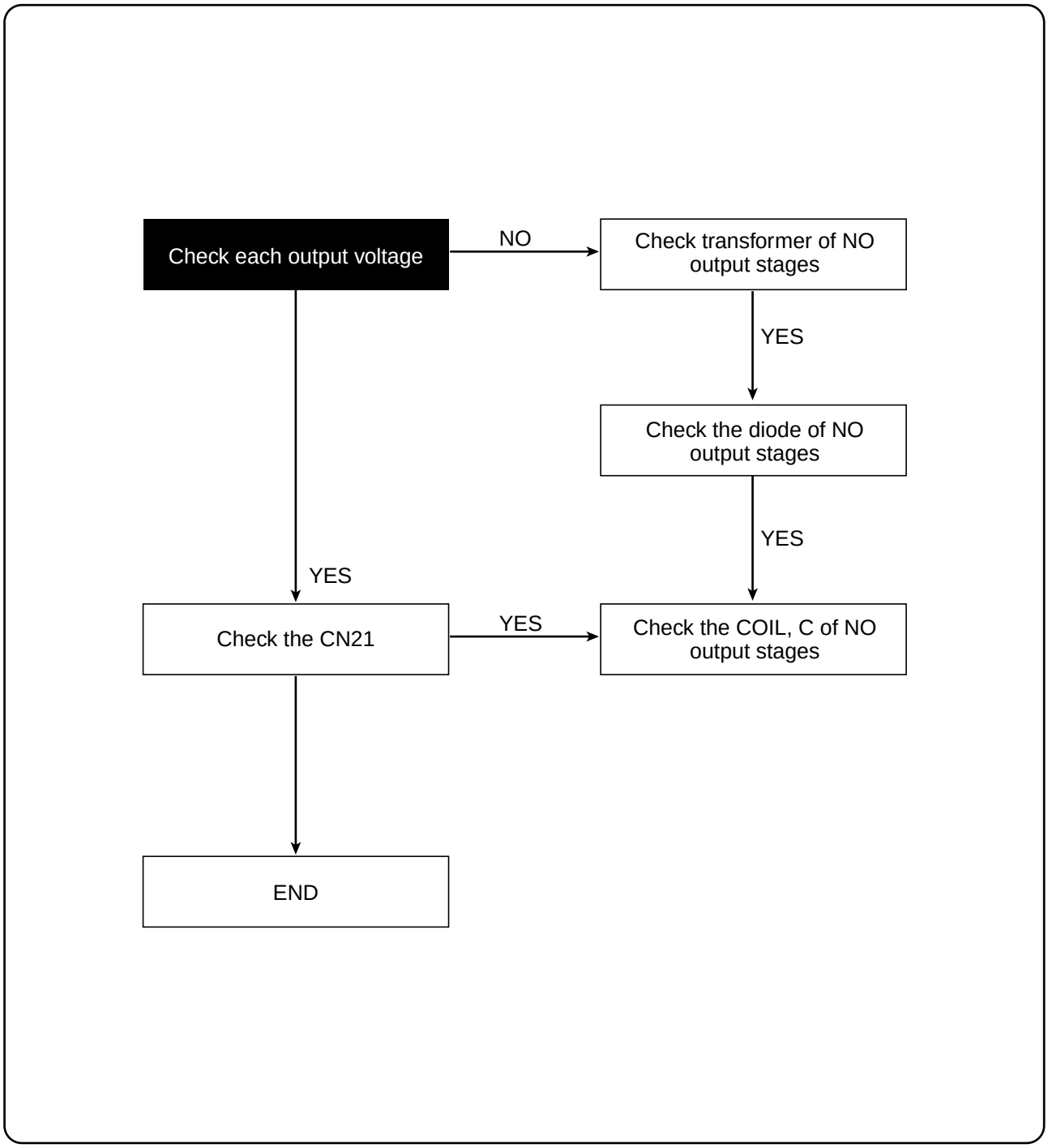
4-1. POWER CIRCUIT

When changing the parts which are broken first, remove the power plug from the socket and then discharge the voltage across the terminals of C807 (use an external 1KΩ(2W) resistance).
When check the primary circuit, Use the oscilloscope isolated properly (Use the isolated transformer) and connect GND to the primary GND, however it is not necessary to isolate the oscilloscope when check the secondary circuit.

A. CHECKING THE PRIMARY CIRCUIT.

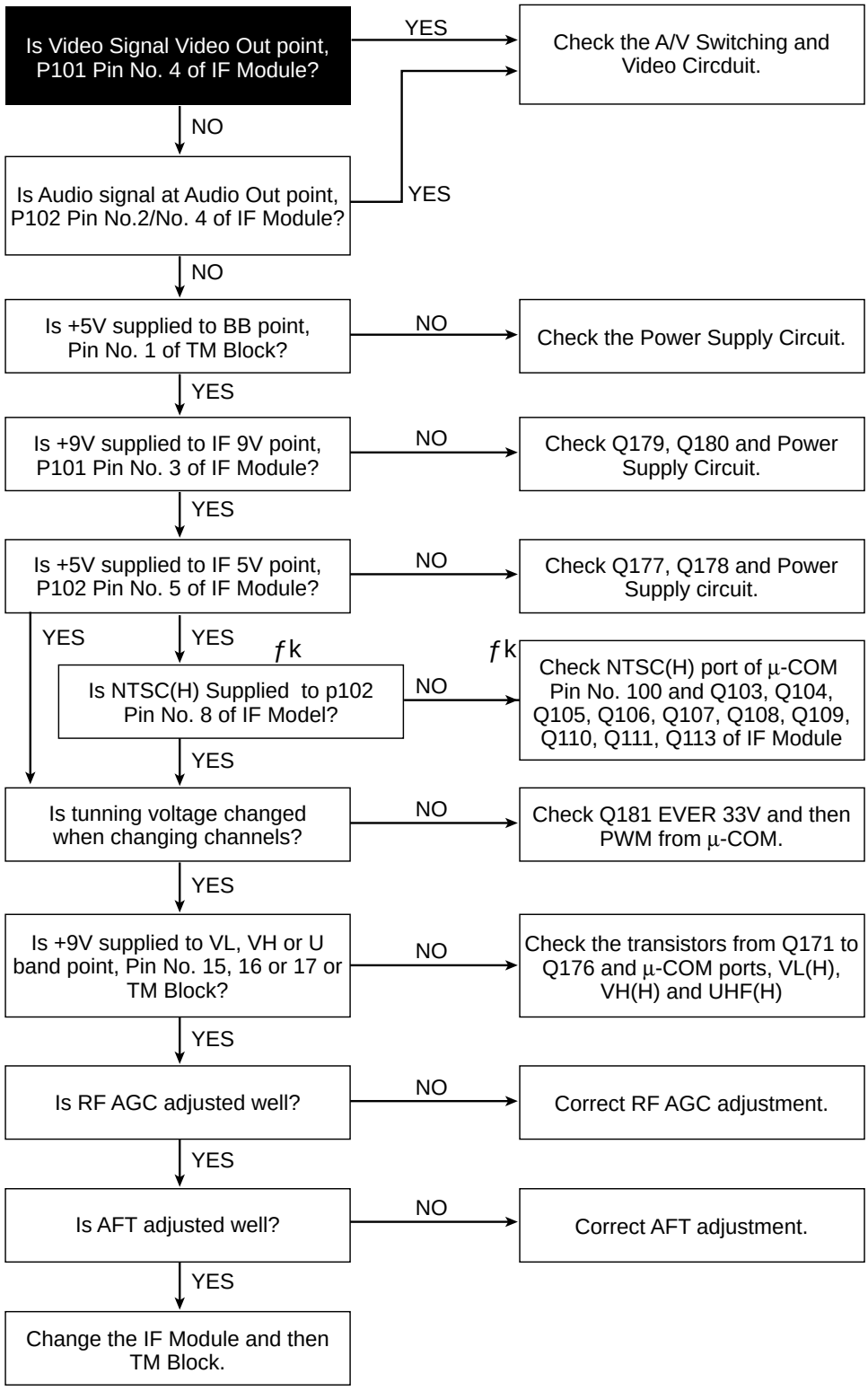


B. CHECKING THE SECONDARY CIRCUIT



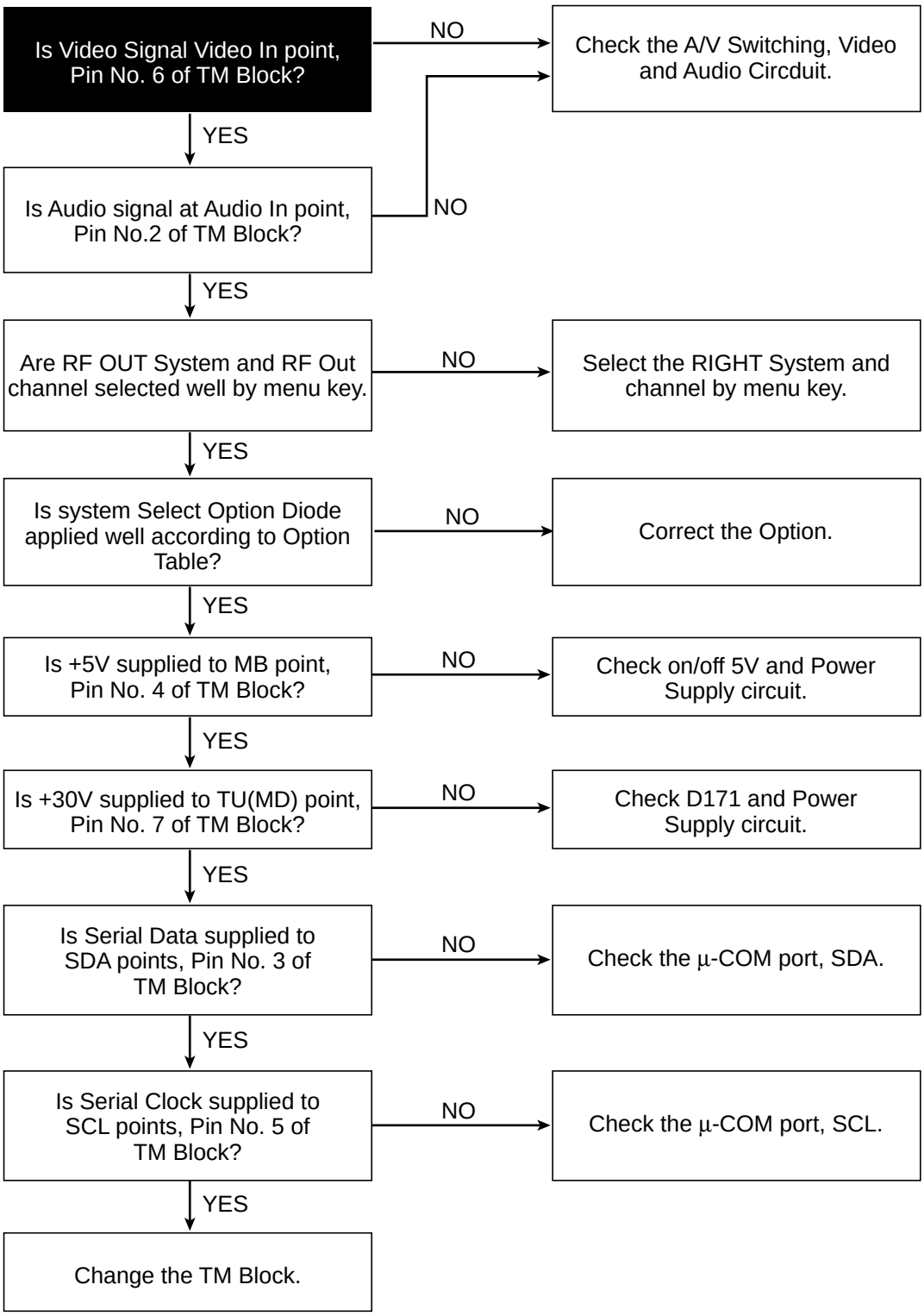
4-2. PIF CIRCUIT TROUBLESHOOTING

A. TROUBLESHOOTING OF RF RECEIVING CIRCUIT


Is Video Signal Video Out point, P101 Pin No. 4 of IF Module?
YES
Check the A/V Switching and Video Circduit.
NO
Is Audio signal at Audio Out point, P102 Pin No.2/No. 4 of IF Module?
YES
NO
Is +5V supplied to BB point, Pin No. 1 of TM Block?
NO
Check the Power Supply Circuit.
YES
Is +9V supplied to IF 9V point, P101 Pin No. 3 of IF Module?
NO
Check Q179, Q180 and Power Supply Circuit.
YES
Is +5V supplied to IF 5V point, P102 Pin No. 5 of IF Module?
NO
Check Q177, Q178 and Power Supply circuit.
YES
YES
ƒk
Is NTSC(H) Supplied to p102 Pin No. 8 of IF Model?
NO
ƒk
Check NTSC(H) port of μ-COM Pin No. 100 and Q103, Q104, Q105, Q106, Q107, Q108, Q109, Q110, Q111, Q113 of IF Module
YES
Is tunning voltage changed when changing channels?
NO
Check Q181 EVER 33V and then PWM from μ-COM.
YES
Is +9V supplied to VL, VH or U band point, Pin No. 15, 16 or 17 or TM Block?
NO
Check the transistors from Q171 to Q176 and μ-COM ports, VL(H), VH(H) and UHF(H)
YES
Is RF AGC adjusted well?
NO
Correct RF AGC adjustment.
YES
Is AFT adjusted well?
NO
Correct AFT adjustment.
YES
Change the IF Module and then TM Block.

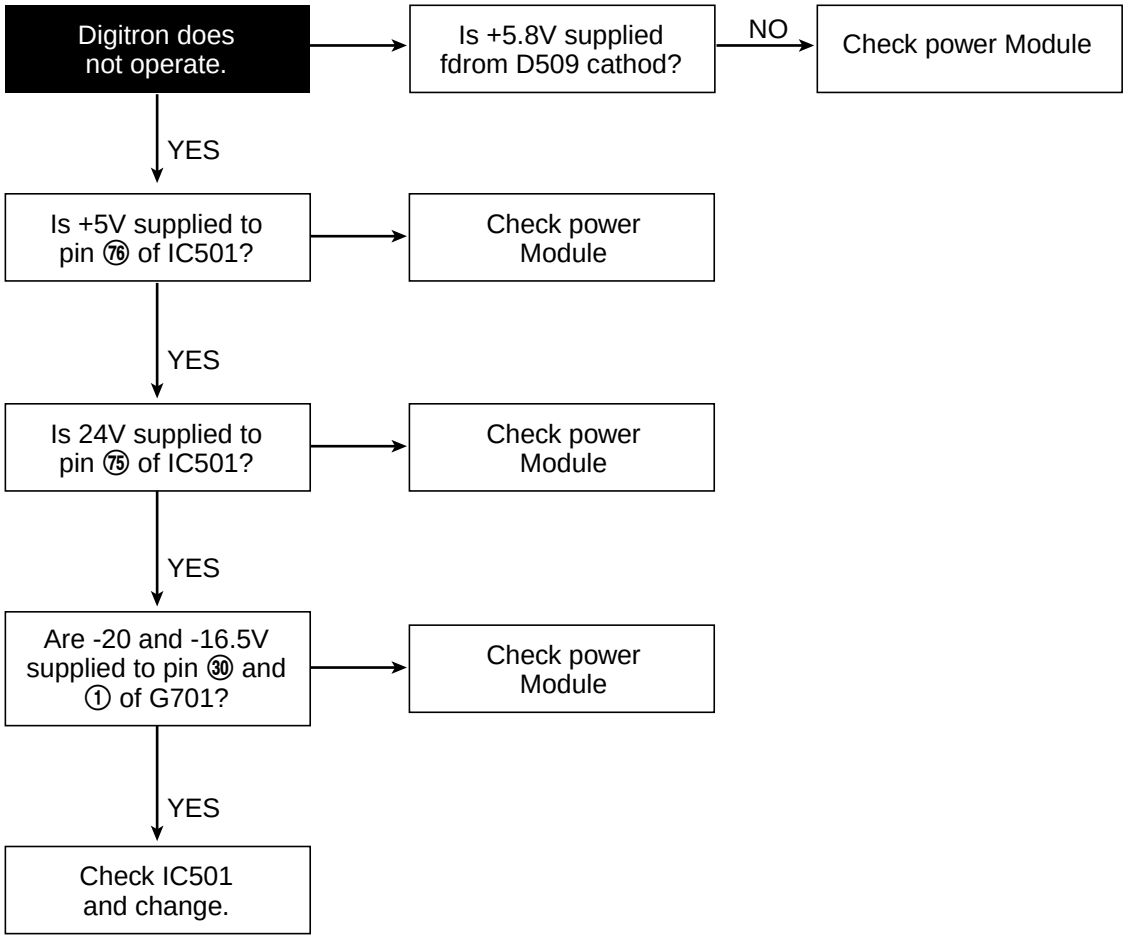
¡ **NOTE:** ƒk means when NTSC signal received.

B. TROUBLESHOOTING OF RF MODULATOR OUT

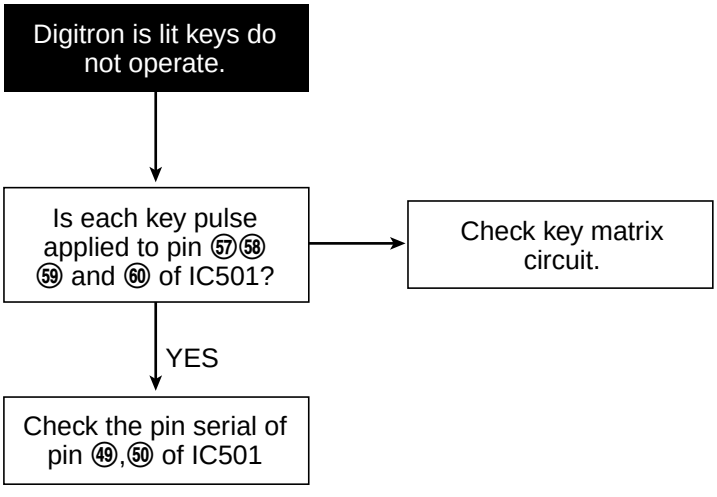

Is Video Signal Video In point, Pin No. 6 of TM Block?
NO
Check the A/V Switching, Video and Audio Circduit.
YES
Is Audio signal at Audio In point, Pin No.2 of TM Block?
NO
YES
Are RF OUT System and RF Out channel selected well by menu key.
NO
Select the RIGHT System and channel by menu key.
YES
Is system Select Option Diode applied well according to Option Table?
NO
Correct the Option.
YES
Is +5V supplied to MB point, Pin No. 4 of TM Block?
NO
Check on/off 5V and Power Supply circuit.
YES
Is +30V supplied to TU(MD) point, Pin No. 7 of TM Block?
NO
Check D171 and Power Supply circuit.
YES
Is Serial Data supplied to SDA points, Pin No. 3 of TM Block?
NO
Check the µ-COM port, SDA.
YES
Is Serial Clock supplied to SCL points, Pin No. 5 of TM Block?
NO
Check the µ-COM port, SCL.
YES
Change the TM Block.

4-3. LOGIC CIRCUIT

A.

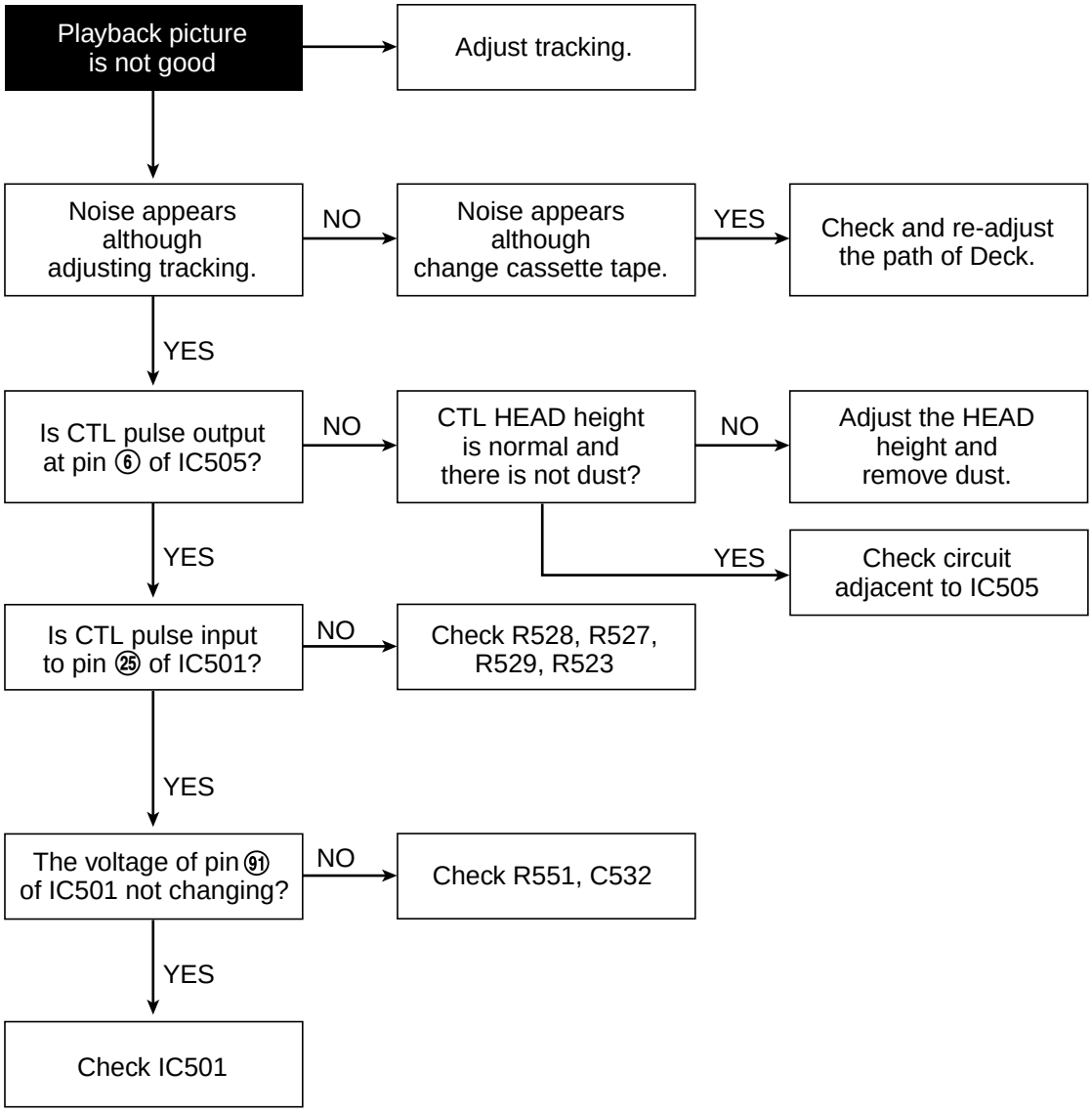


B.

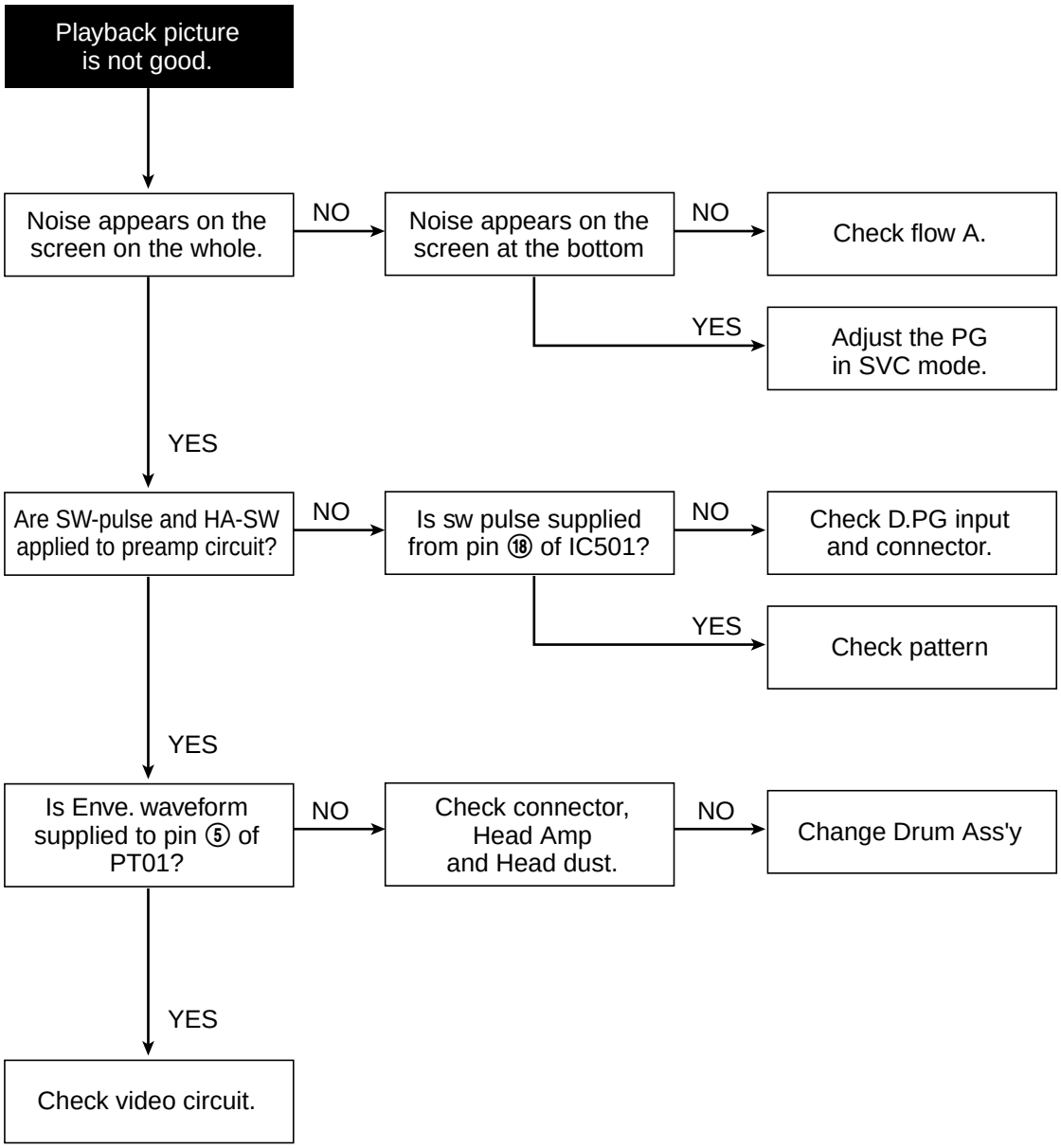

Digitron is lit keys do not operate.
Is each key pulse applied to pin ㊼㊽ ㊾ and ㊿ of IC501?
Check key matrix circuit.
YES
Check the pin serial of pin ㊾,㊿ of IC501

4-4. SERVO-SYSCON CIRCUIT

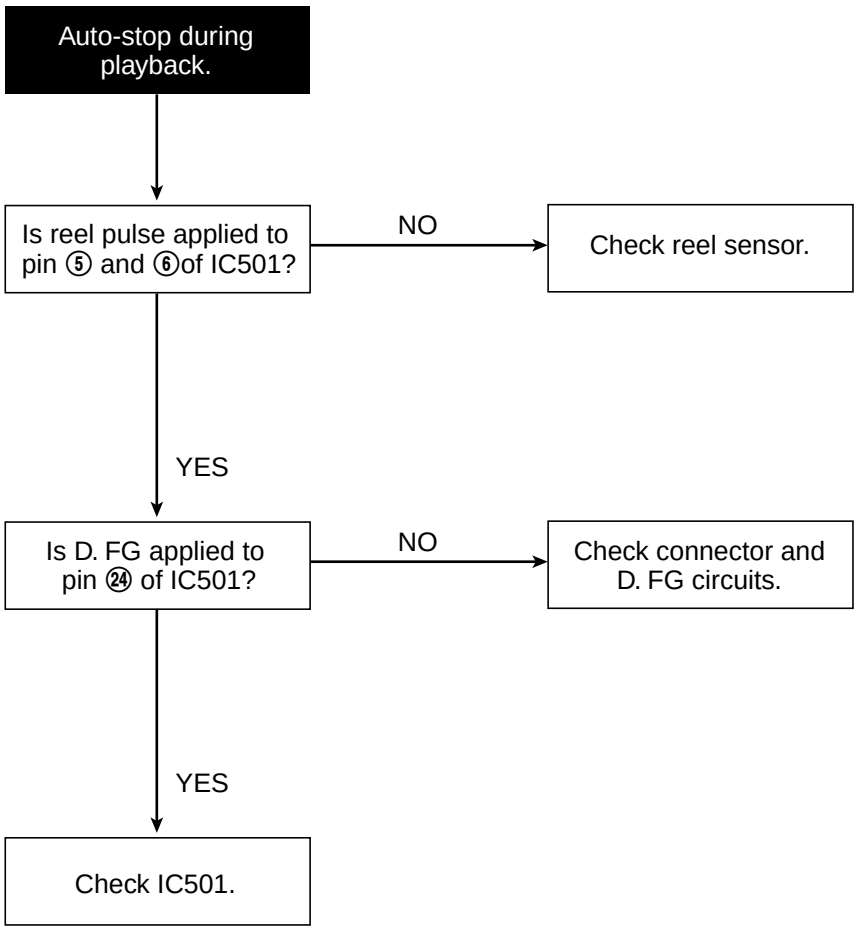
A.



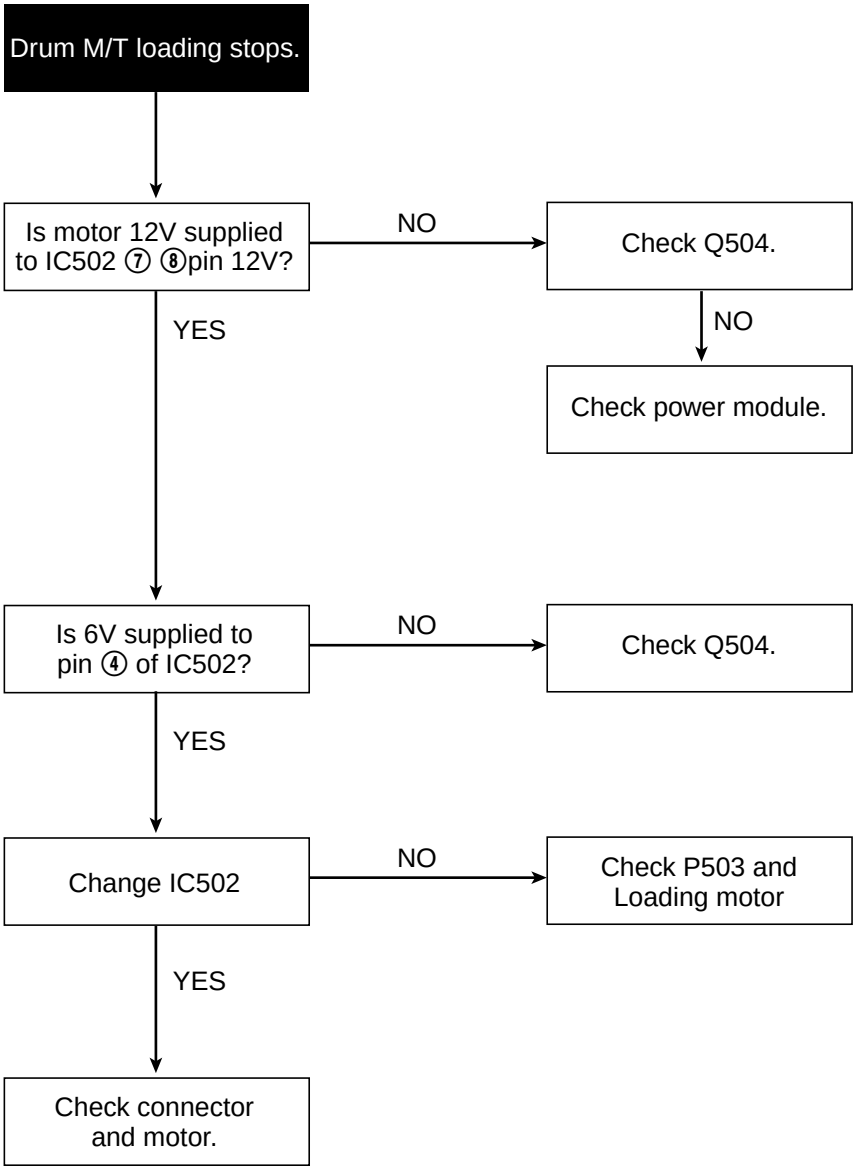
B.


Playback picture is not good.
Noise appears on the screen on the whole.
NO
Noise appears on the screen at the bottom
NO
Check flow A.
YES
Adjust the PG in SVC mode.
YES
Are SW-pulse and HA-SW applied to preamp circuit?
NO
Is sw pulse supplied from pin ⑱ of IC501?
NO
Check D.PG input and connector.
YES
Check pattern
YES
Is Enve. waveform supplied to pin ⑤ of PT01?
NO
Check connector, Head Amp and Head dust.
NO
Change Drum Ass'y
YES
Check video circuit.

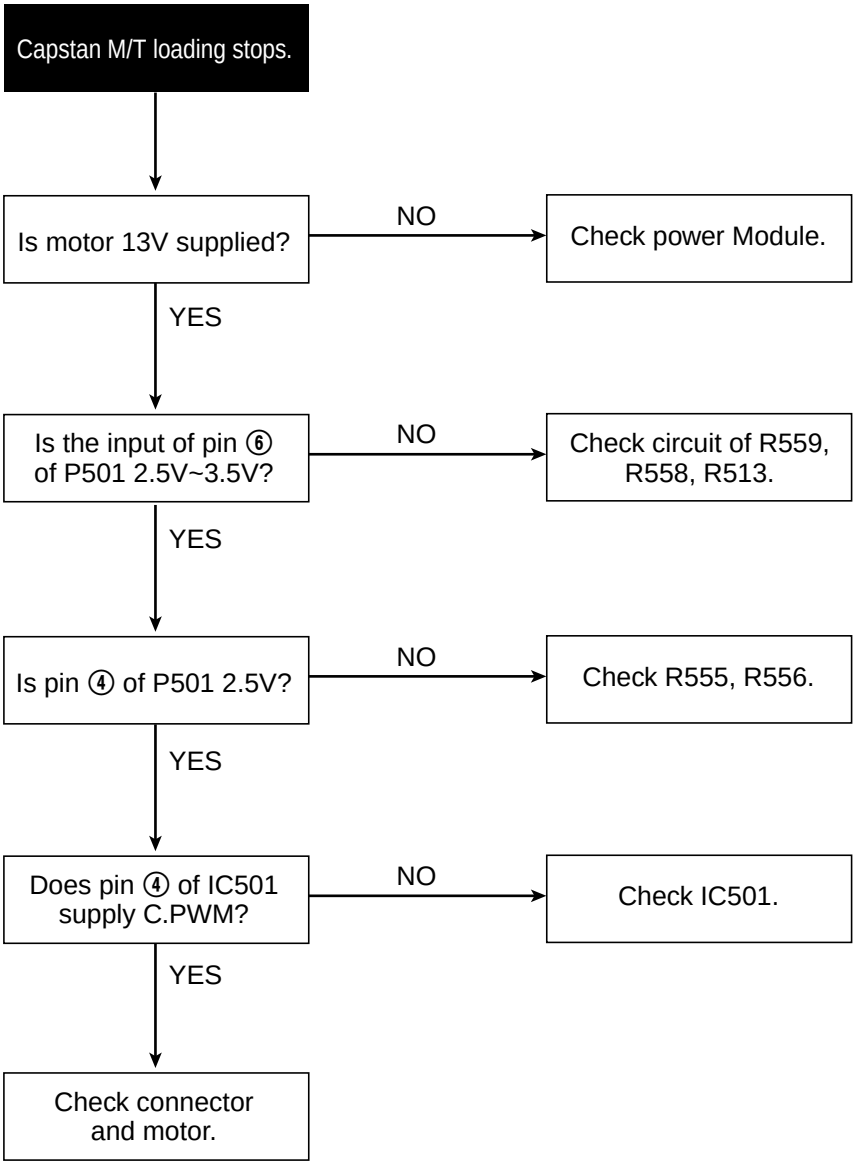
C.


Auto-stop during playback.
Is reel pulse applied to pin ⑤ and ⑥of IC501?
NO
Check reel sensor.
YES
Is D. FG applied to pin ㉔ of IC501?
NO
Check connector and D. FG circuits.
YES
Check IC501.

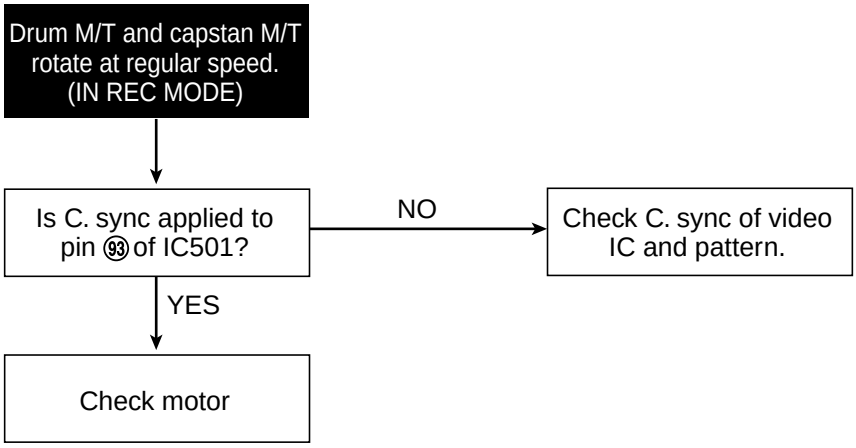
D.


Drum M/T loading stops.
Is motor 12V supplied to IC502 ⑦ ⑧pin 12V?
NO
Check Q504.
NO
Check power module.
YES
Is 6V supplied to pin ④ of IC502?
NO
Check Q504.
YES
Change IC502
NO
Check P503 and Loading motor
YES
Check connector and motor.

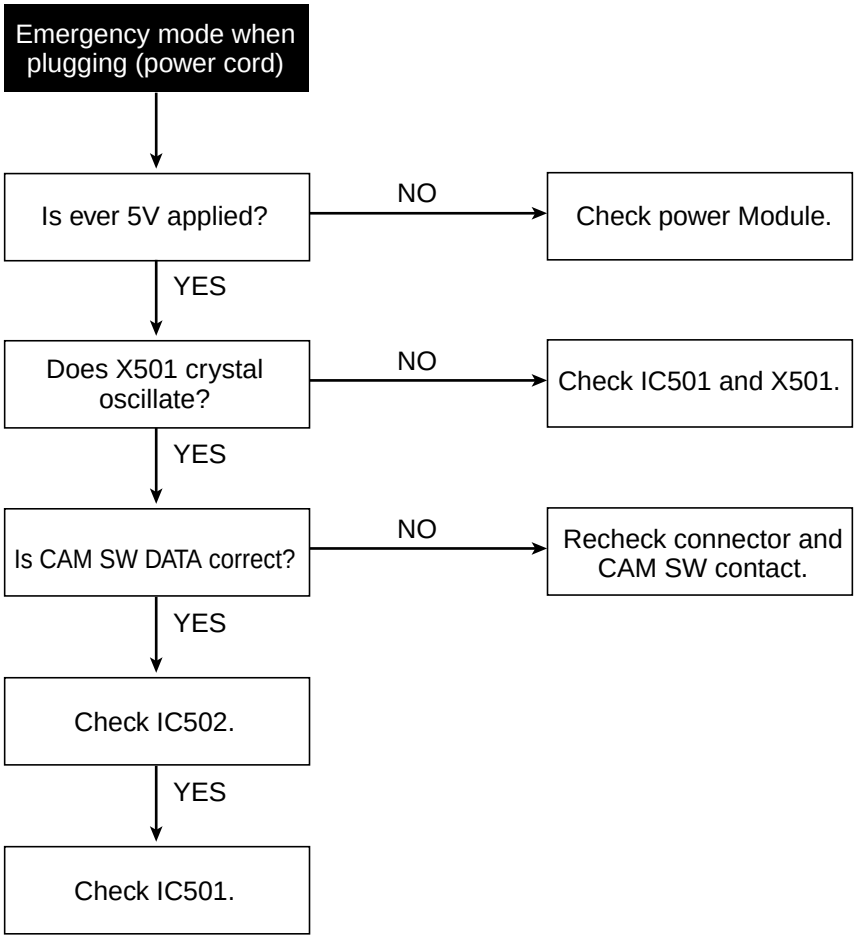
E.


Capstan M/T loading stops.
Is motor 13V supplied?
NO
Check power Module.
YES
Is the input of pin ⑥ of P501 2.5V~3.5V?
NO
Check circuit of R559, R558, R513.
YES
Is pin ④ of P501 2.5V?
NO
Check R555, R556.
YES
Does pin ④ of IC501 supply C.PWM?
NO
Check IC501.
YES
Check connector and motor.

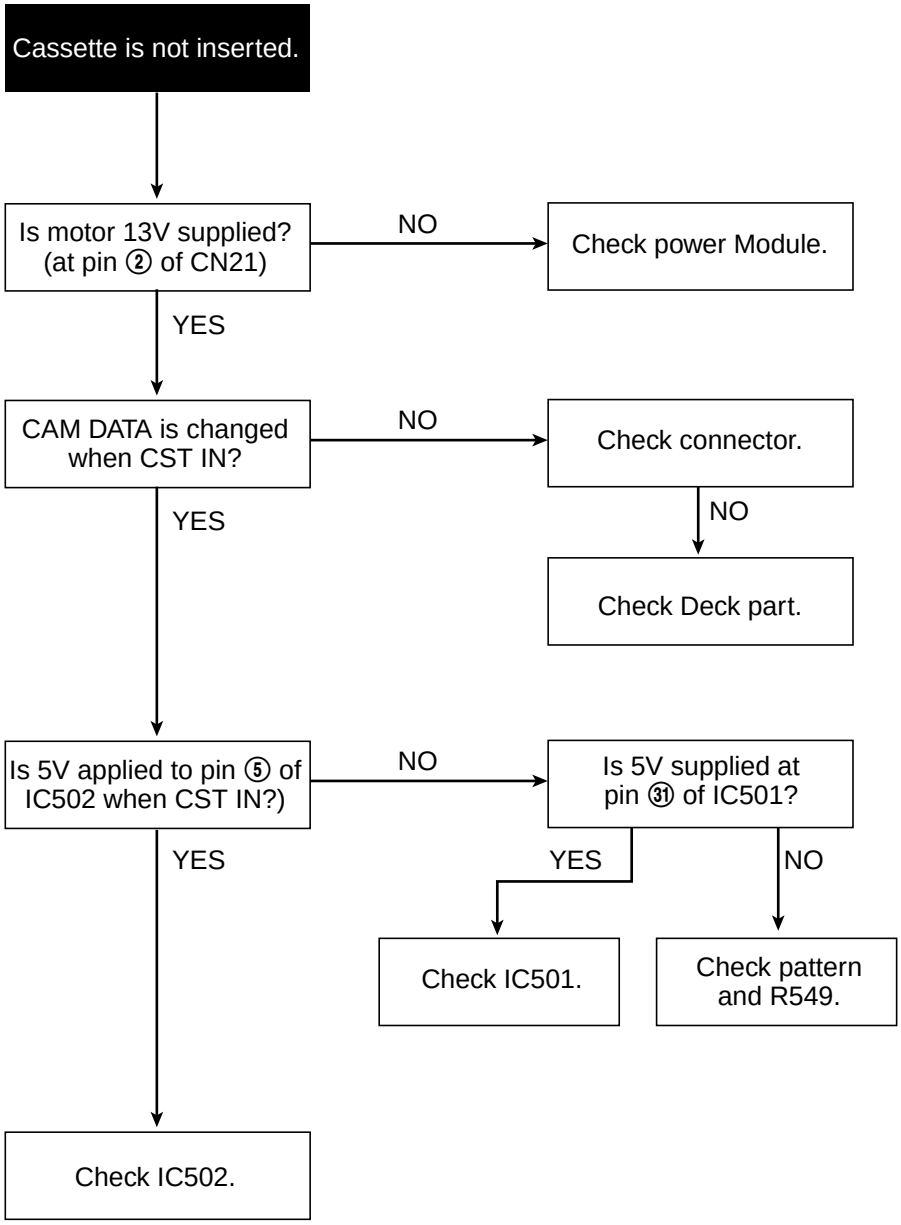
F.


Drum M/T and capstan M/T rotate at regular speed. (IN REC MODE)
Is C. sync applied to pin ⑨③ of IC501?
NO
Check C. sync of video IC and pattern.
YES
Check motor

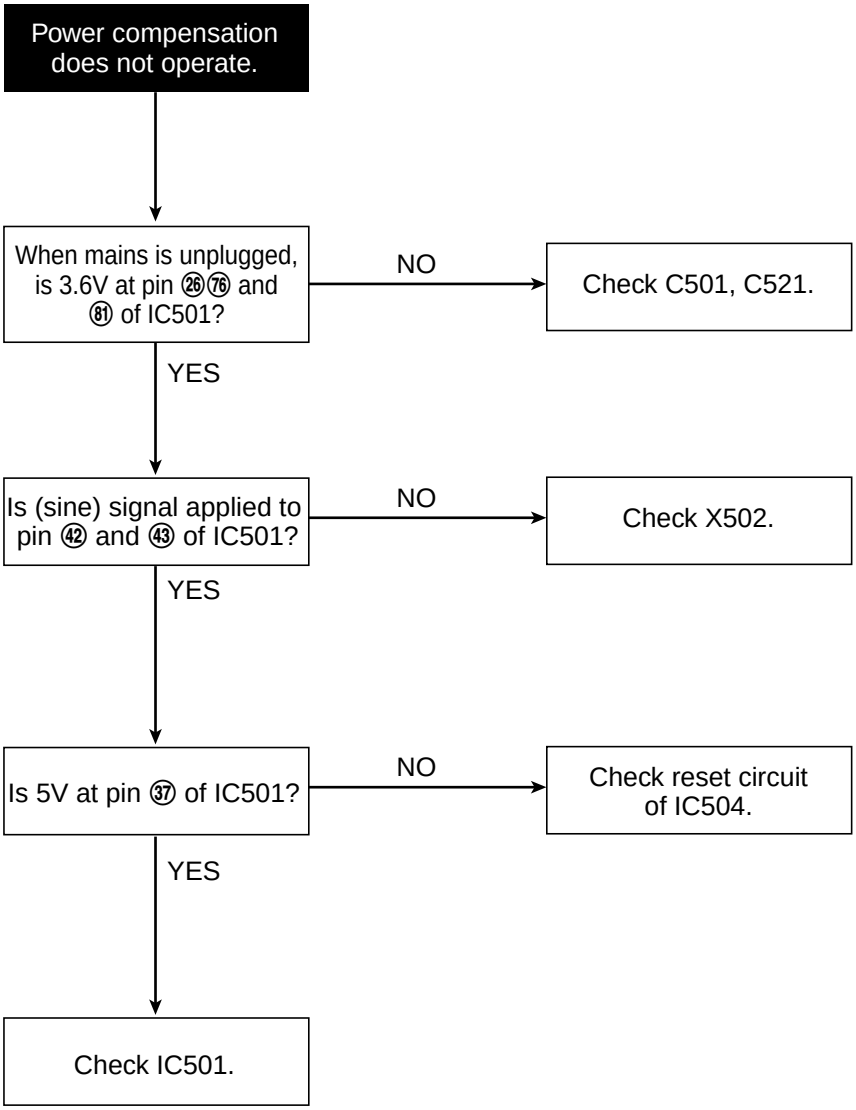
G.


Emergency mode when plugging (power cord)
Is ever 5V applied?
NO
Check power Module.
YES
Does X501 crystal oscillate?
NO
Check IC501 and X501.
YES
Is CAM SW DATA correct?
NO
Recheck connector and CAM SW contact.
YES
Check IC502.
YES
Check IC501.

H.

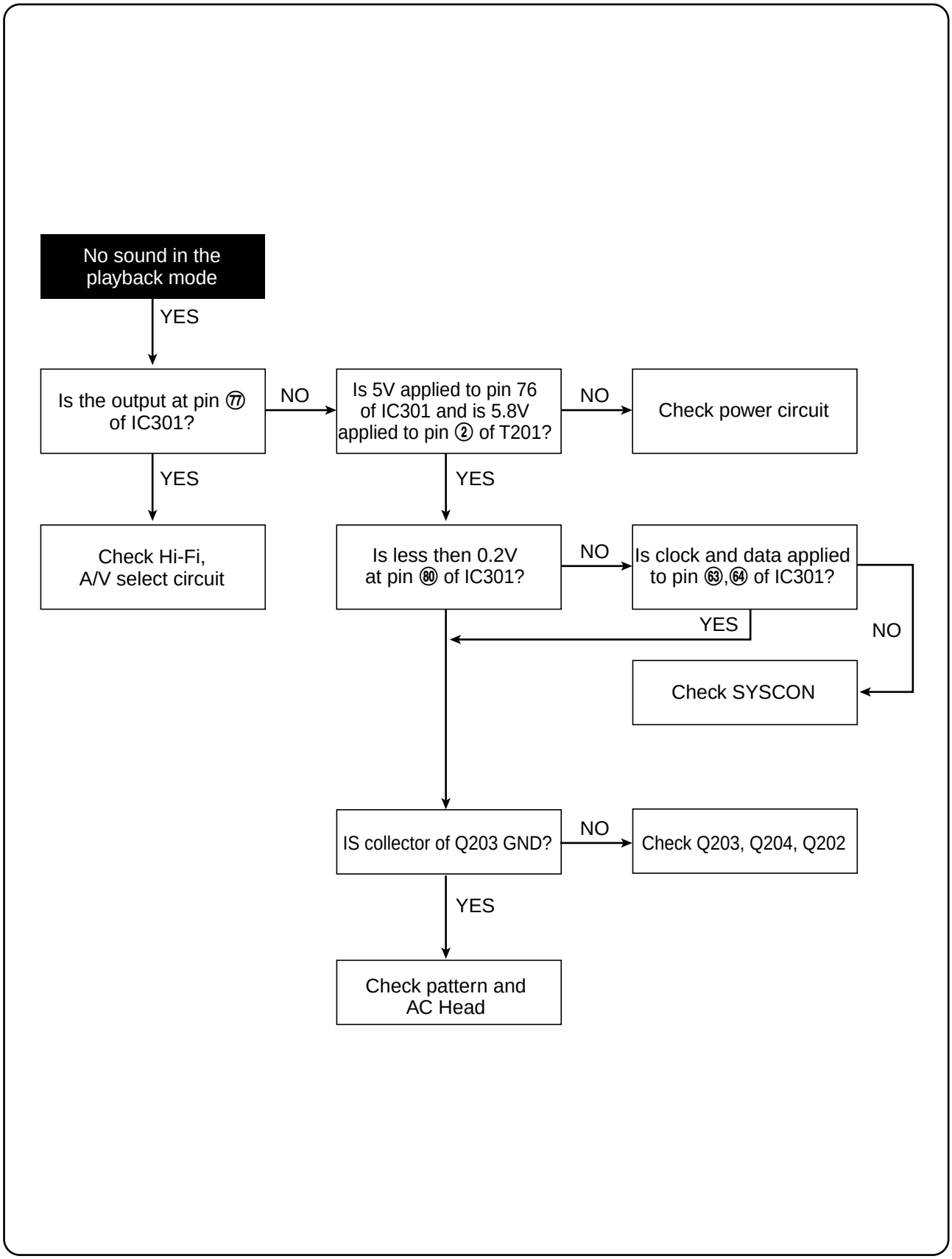

Cassette is not inserted.
Is motor 13V supplied? (at pin ② of CN21)
NO
Check power Module.
YES
CAM DATA is changed when CST IN?
NO
Check connector.
NO
YES
Check Deck part.
Is 5V applied to pin ⑤ of IC502 when CST IN?)
NO
Is 5V supplied at pin ㉛ of IC501?
YES
YES
NO
Check IC501.
Check pattern and R549.
Check IC502.

I.

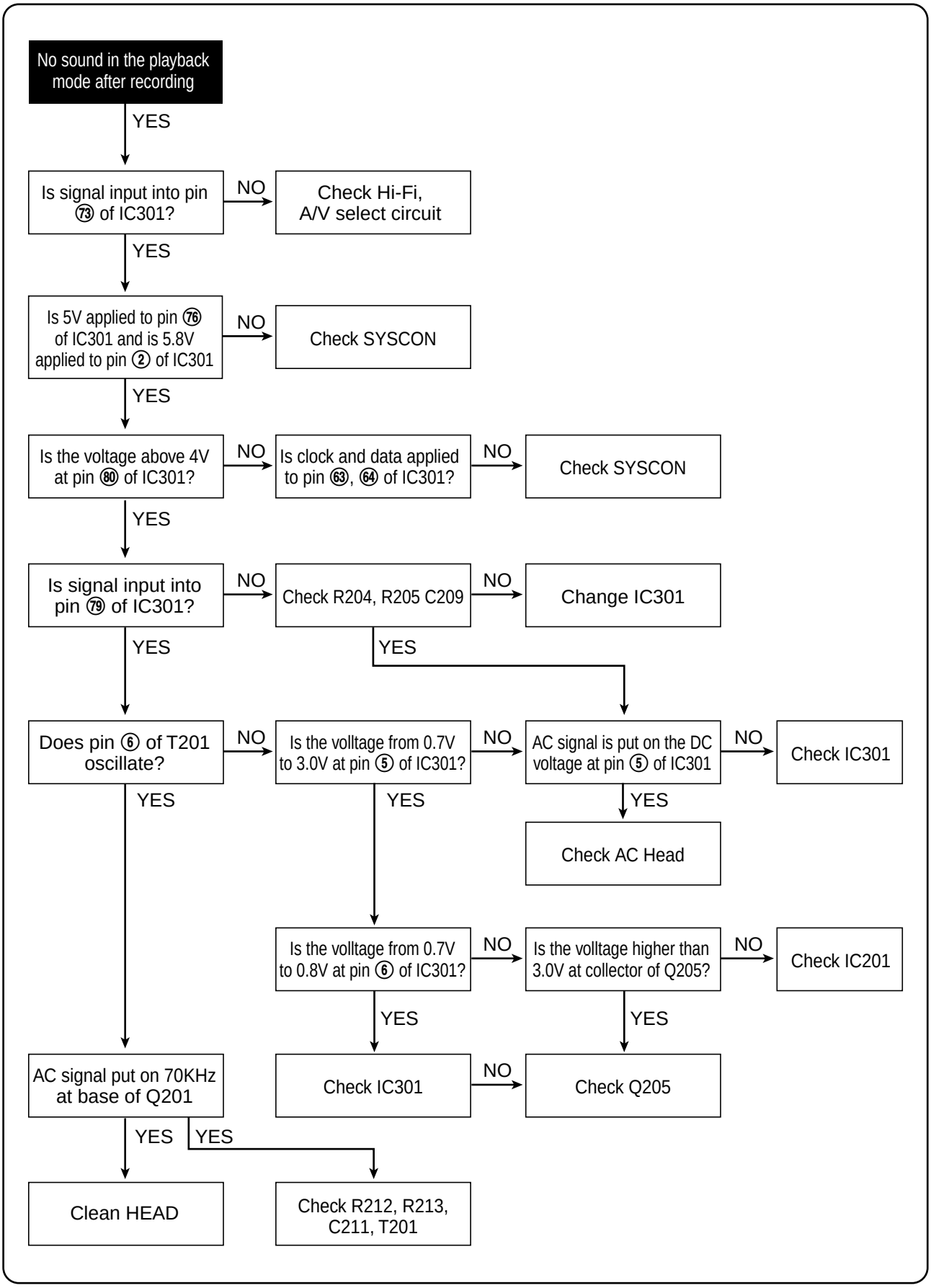

Power compensation does not operate.
When mains is unplugged, is 3.6V at pin ㉖㊻ and ㊽ of IC501?
NO
Check C501, C521.
YES
Is (sine) signal applied to pin ㊷ and ㊸ of IC501?
NO
Check X502.
YES
Is 5V at pin ㊲ of IC501?
NO
Check reset circuit of IC504.
YES
Check IC501.

4-5. AUDIO CIRCUIT (NORMAL)

A. TROUBLESHOOTING OF PB MODE.

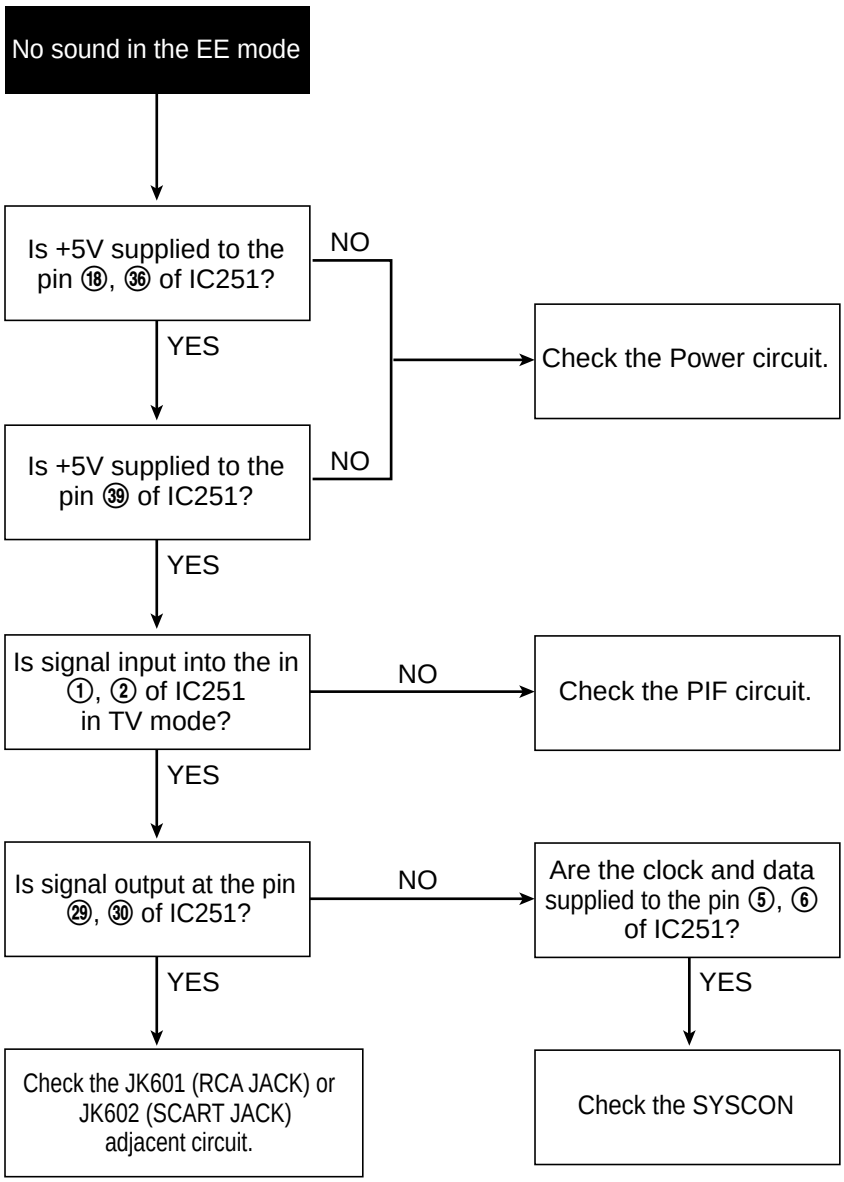

No sound in the playback mode
YES
Is the output at pin ⑦⑦ of IC301?
NO
Is 5V applied to pin 76 of IC301 and is 5.8V applied to pin ② of T201?
NO
Check power circuit
YES
YES
Check Hi-Fi, A/V select circuit
Is less then 0.2V at pin ⑧⓪ of IC301?
NO
Is clock and data applied to pin ⑥③,⑥④ of IC301?
YES
NO
Check SYSCON
IS collector of Q203 GND?
NO
Check Q203, Q204, Q202
YES
Check pattern and AC Head

B. TROUBLESHOOTING OF REC MODE

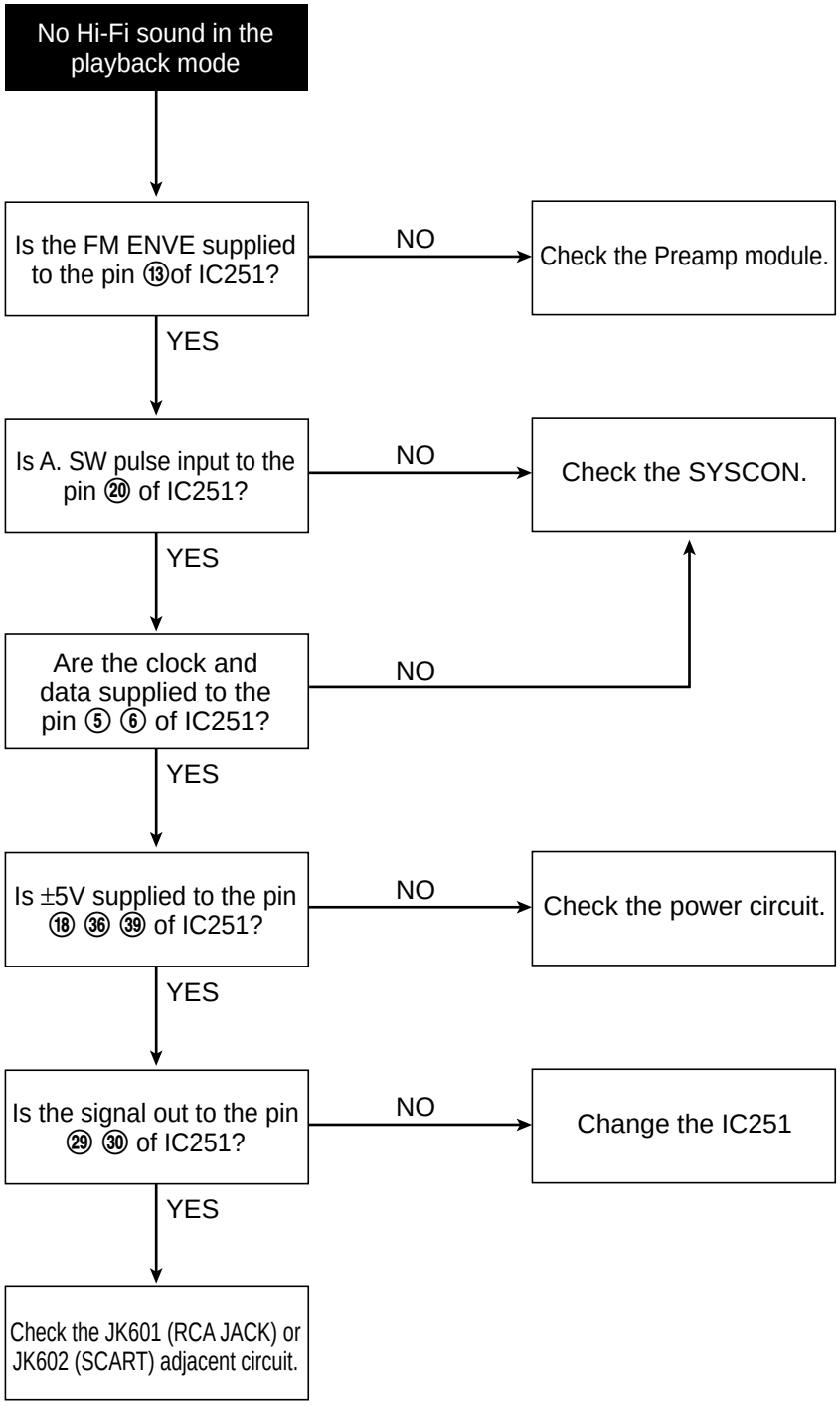


4-6. AUDIO CIRCUIT (HI-FI)

A. TROUBLESHOOTING OF EE MODE.

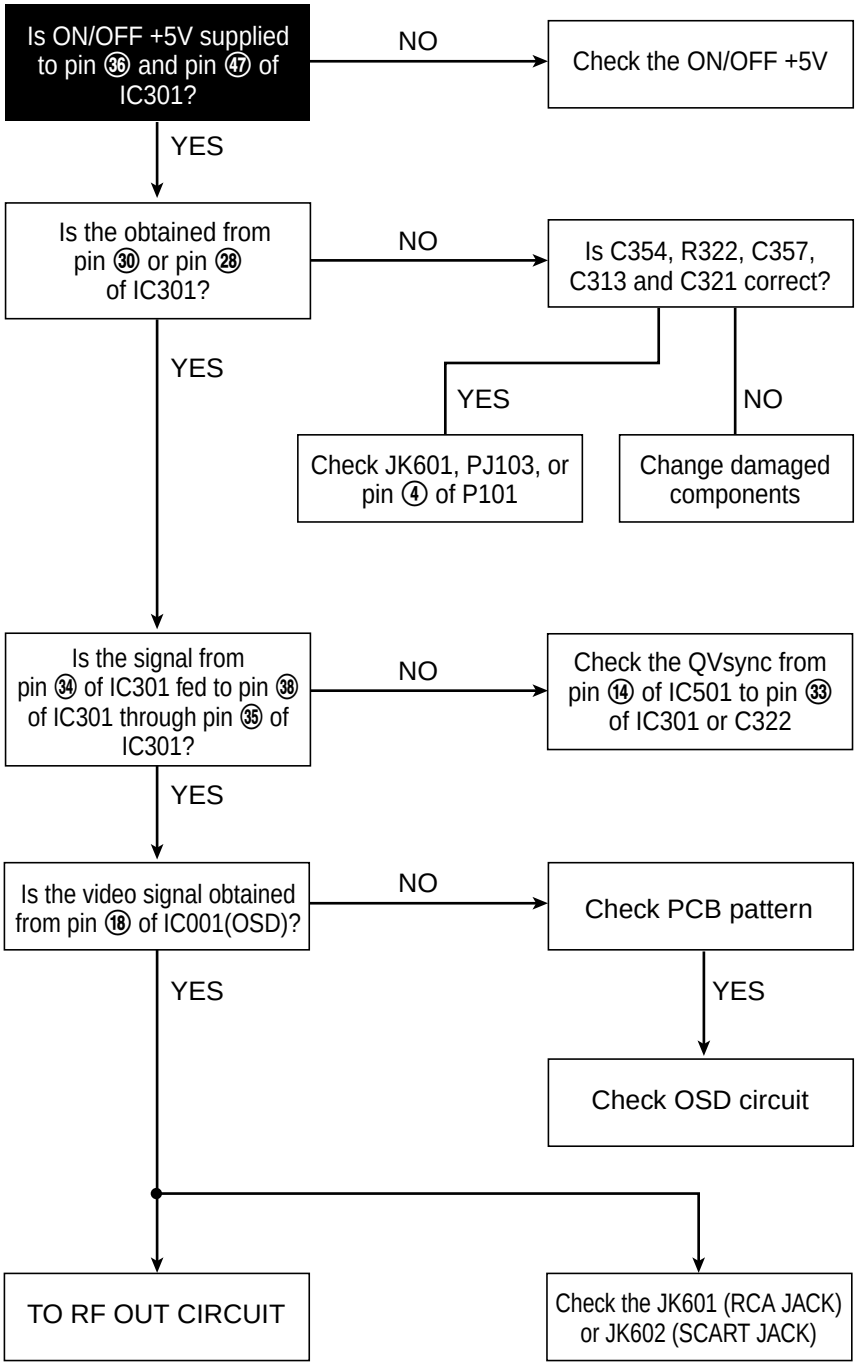

No sound in the EE mode
Is +5V supplied to the pin ⑱, ㊱ of IC251?
NO
YES
Check the Power circuit.
Is +5V supplied to the pin ㊴ of IC251?
NO
YES
Is signal input into the in ①, ② of IC251 in TV mode?
NO
Check the PIF circuit.
YES
Is signal output at the pin ㉙, ㉚ of IC251?
NO
Are the clock and data supplied to the pin ⑤, ⑥ of IC251?
YES
YES
Check the JK601 (RCA JACK) or JK602 (SCART JACK) adjacent circuit.
Check the SYSCON

B. TROUBLESHOOTING OF Hi-Fi REC AND PB

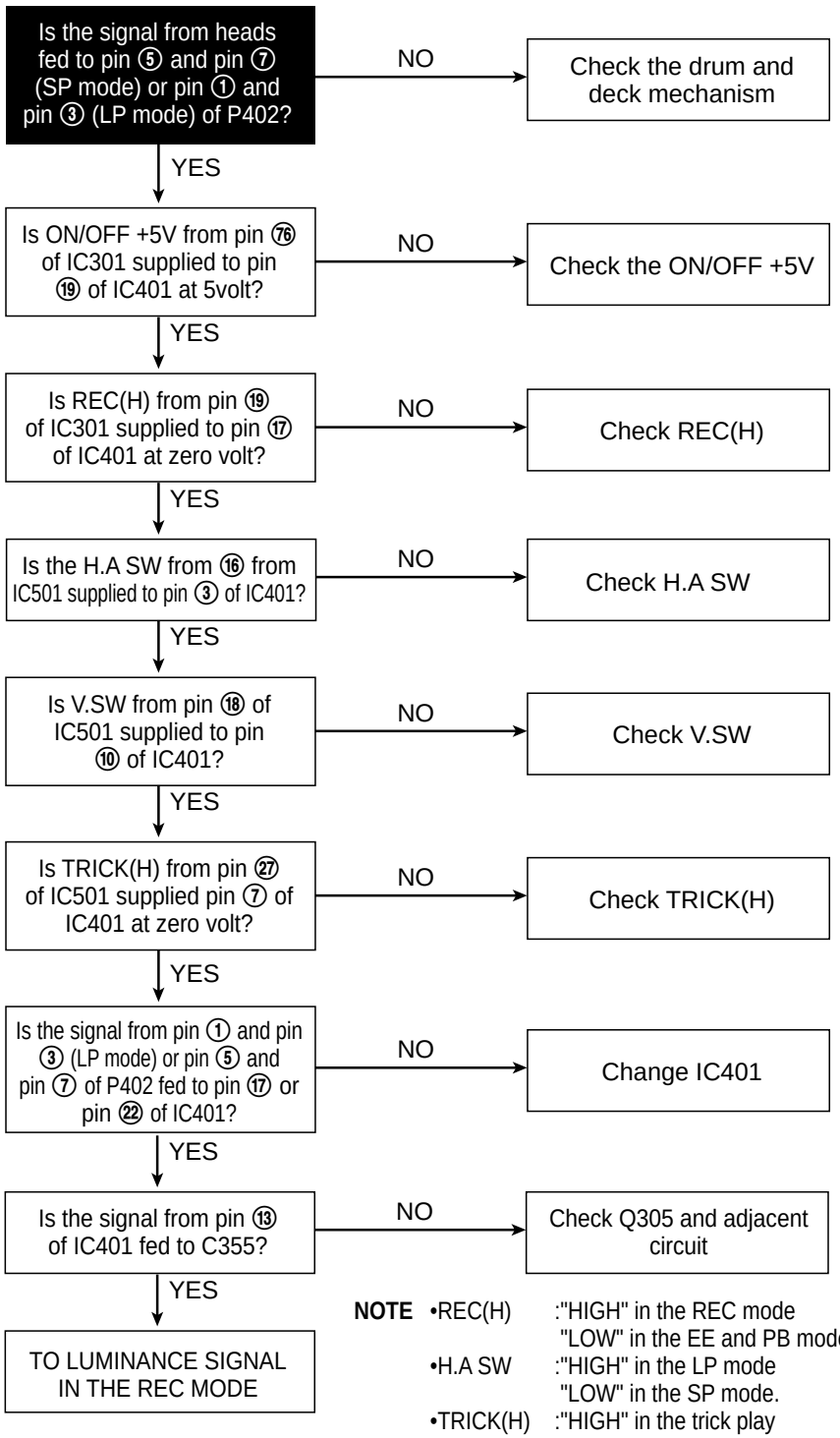

No Hi-Fi sound in the playback mode
Is the FM ENVE supplied to the pin ⑬of IC251?
NO
Check the Preamp module.
YES
Is A. SW pulse input to the pin ⑳ of IC251?
NO
Check the SYSCON.
YES
Are the clock and data supplied to the pin ⑤ ⑥ of IC251?
NO
YES
Is ±5V supplied to the pin ⑱ ㊱ ㊴ of IC251?
NO
Check the power circuit.
YES
Is the signal out to the pin ㉙ ㉚ of IC251?
NO
Change the IC251
YES
Check the JK601 (RCA JACK) or JK602 (SCART) adjacent circuit.

4-7. VIDEO CIRCUIT

A. TROUBLESHOOTING OF EE MODE.


Is ON/OFF +5V supplied to pin ㊱ and pin ㊼ of IC301?
NO
Check the ON/OFF +5V
YES
Is the obtained from pin ㉚ or pin ㉘ of IC301?
NO
Is C354, R322, C357, C313 and C321 correct?
YES
NO
YES
Check JK601, PJ103, or pin ④ of P101
Change damaged components
Is the signal from pin ㉞ of IC301 fed to pin ㊳ of IC301 through pin ㉟ of IC301?
NO
Check the QVsync from pin ⑭ of IC501 to pin ㉝ of IC301 or C322
YES
Is the video signal obtained from pin ⑱ of IC001(OSD)?
NO
Check PCB pattern
YES
YES
Check OSD circuit
TO RF OUT CIRCUIT
Check the JK601 (RCA JACK) or JK602 (SCART JACK)

B. TROUBLESHOOTING OF PRE-AMP IN THE PLAYBACK MODE.


Is the signal from heads fed to pin ⑤ and pin ⑦ (SP mode) or pin ① and pin ③ (LP mode) of P402?
NO
Check the drum and deck mechanism
YES
Is ON/OFF +5V from pin ⑯ of IC301 supplied to pin ⑲ of IC401 at 5volt?
NO
Check the ON/OFF +5V
YES
Is REC(H) from pin ⑲ of IC301 supplied to pin ⑰ of IC401 at zero volt?
NO
Check REC(H)
YES
Is the H.A SW from ⑯ from IC501 supplied to pin ③ of IC401?
NO
Check H.A SW
YES
Is V.SW from pin ⑱ of IC501 supplied to pin ⑩ of IC401?
NO
Check V.SW
YES
Is TRICK(H) from pin ㉗ of IC501 supplied pin ⑦ of IC401 at zero volt?
NO
Check TRICK(H)
YES
Is the signal from pin ① and pin ③ (LP mode) or pin ⑤ and pin ⑦ of P402 fed to pin ⑰ or pin ㉒ of IC401?
NO
Change IC401
YES
Is the signal from pin ⑬ of IC401 fed to C355?
NO
Check Q305 and adjacent circuit
YES
TO LUMINANCE SIGNAL IN THE REC MODE

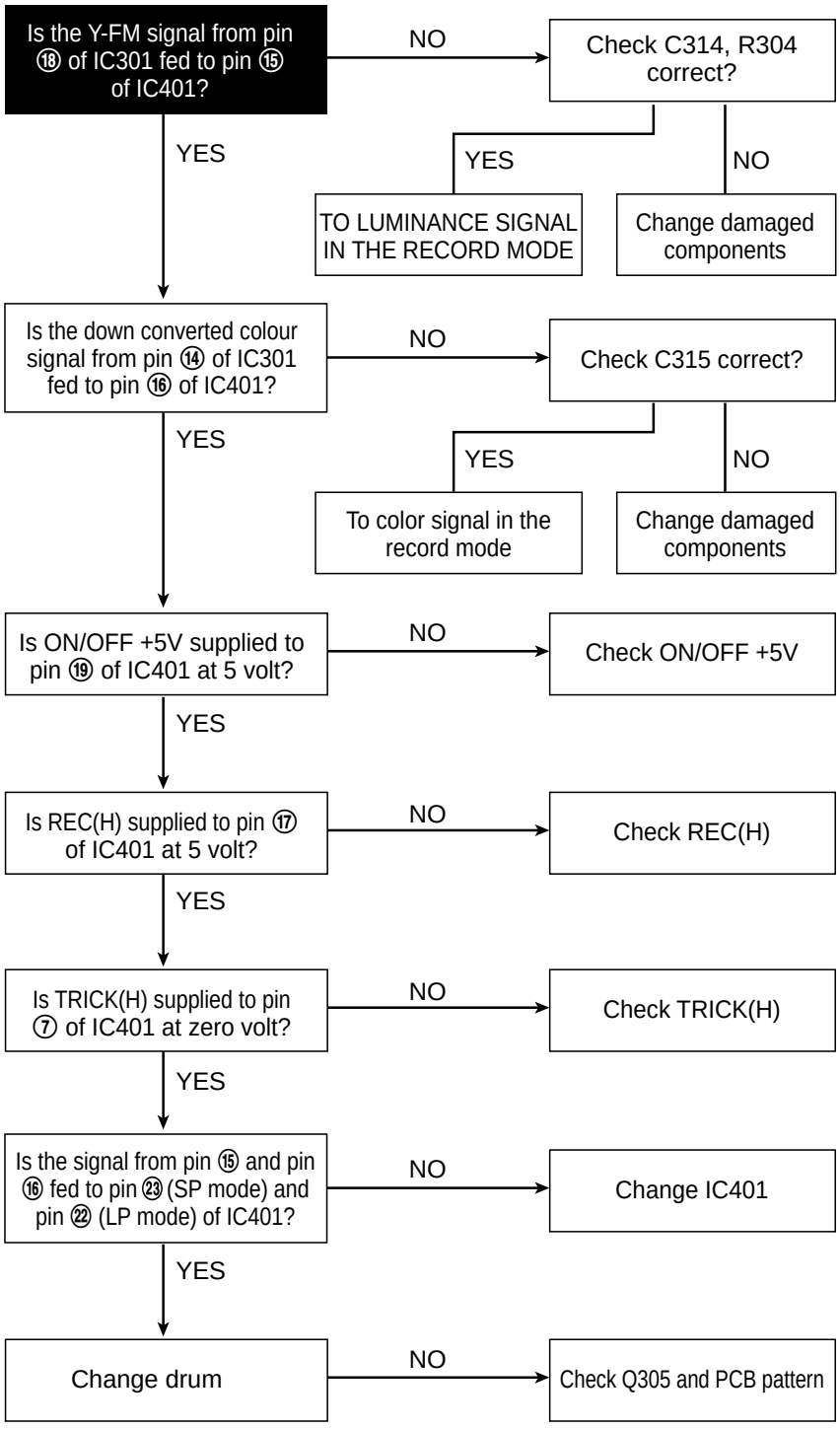
NOTE •REC(H) :"HIGH" in the REC mode
"LOW" in the EE and PB mode.
•H.A SW :"HIGH" in the LP mode
"LOW" in the SP mode.
•TRICK(H) :"HIGH" in the trick play
"LOW" in the except trick play.

* The pin # of IC401 is changed according to SET.

DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

C. TROUBLESHOOTING OF PRE-AMP CIRCUIT IN THE RECORD MODE.

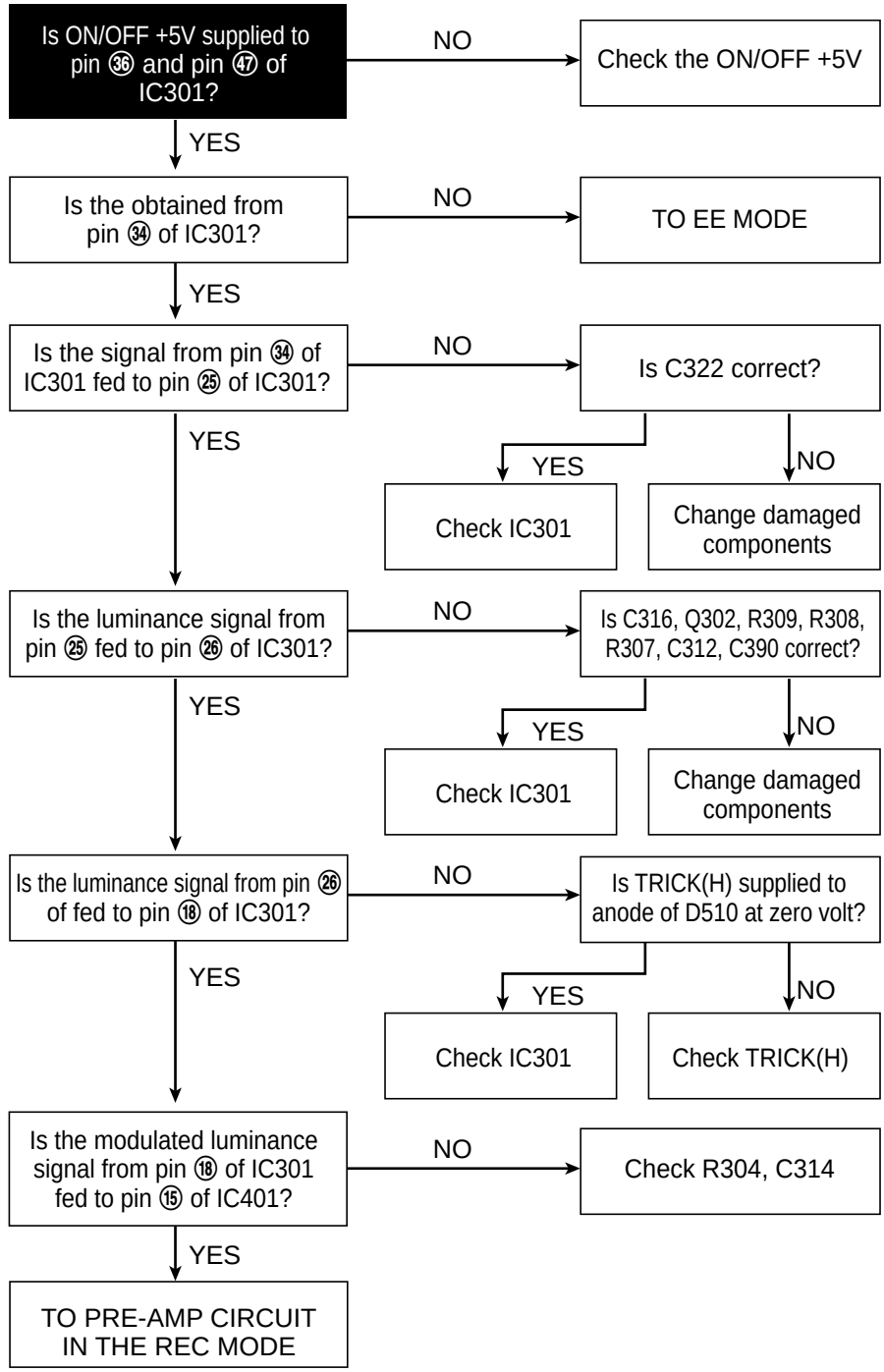

Is the Y-FM signal from pin ⑱ of IC301 fed to pin ⑮ of IC401?
NO
Check C314, R304 correct?
YES
YES
NO
TO LUMINANCE SIGNAL IN THE RECORD MODE
Change damaged components
Is the down converted colour signal from pin ⑭ of IC301 fed to pin ⑯ of IC401?
NO
Check C315 correct?
YES
YES
NO
To color signal in the record mode
Change damaged components
Is ON/OFF +5V supplied to pin ⑲ of IC401 at 5 volt?
NO
Check ON/OFF +5V
YES
Is REC(H) supplied to pin ⑰ of IC401 at 5 volt?
NO
Check REC(H)
YES
Is TRICK(H) supplied to pin ⑦ of IC401 at zero volt?
NO
Check TRICK(H)
YES
Is the signal from pin ⑮ and pin ⑯ fed to pin ㉓ (SP mode) and pin ㉒ (LP mode) of IC401?
NO
Change IC401
YES
Change drum
NO
Check Q305 and PCB pattern

* The pin # of IC401 is changed according to SET.

DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

D. TROUBLESHOOTING OF LUMINANCE SIGNAL IN THE RECORD MODE.

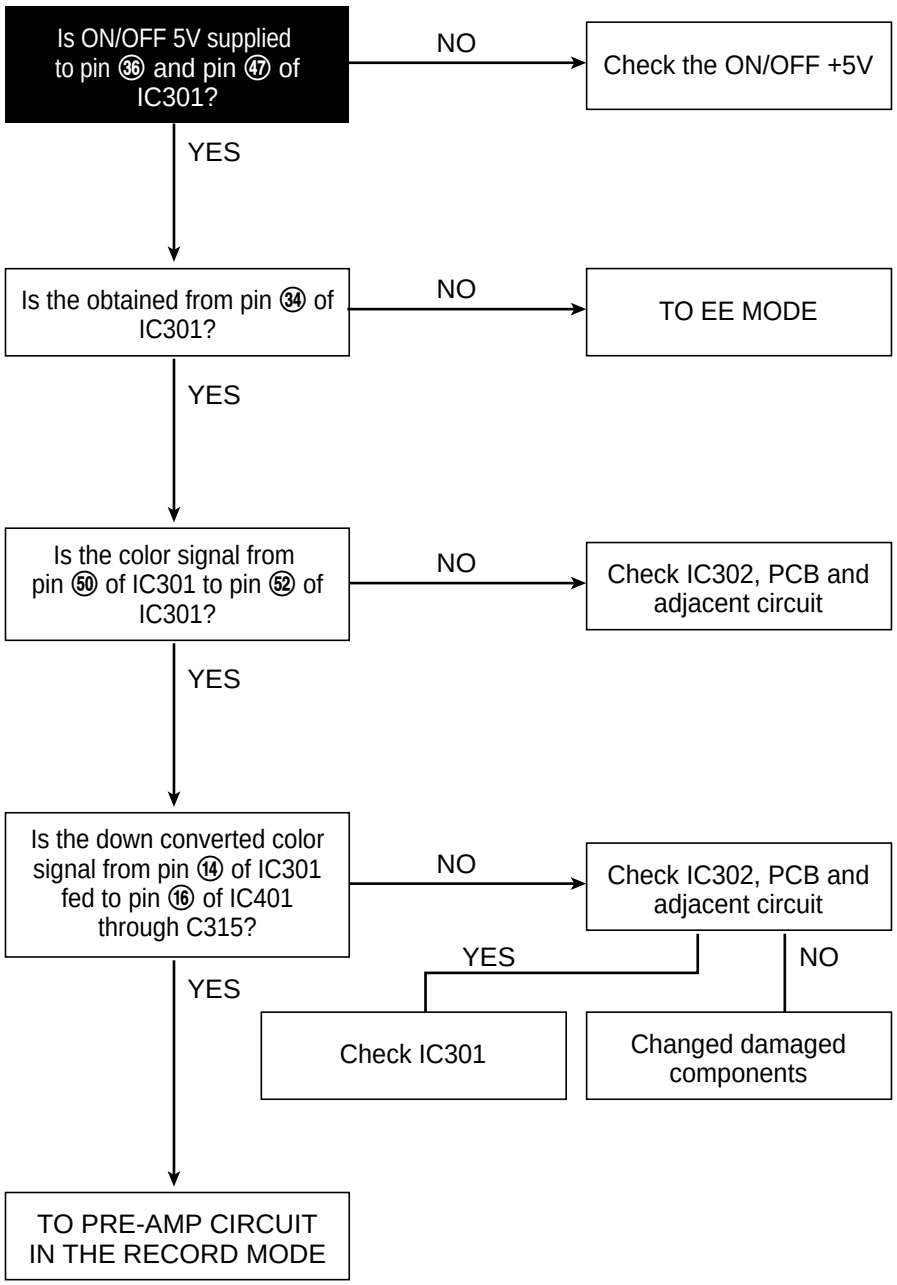

Is ON/OFF +5V supplied to pin ㊱ and pin ㊼ of IC301?
NO
Check the ON/OFF +5V
YES
Is the obtained from pin ㉞ of IC301?
NO
TO EE MODE
YES
Is the signal from pin ㉞ of IC301 fed to pin ㉕ of IC301?
NO
Is C322 correct?
YES
YES
NO
Check IC301
Change damaged components
Is the luminance signal from pin ㉕ fed to pin ㉖ of IC301?
NO
Is C316, Q302, R309, R308, R307, C312, C390 correct?
YES
YES
NO
Check IC301
Change damaged components
Is the luminance signal from pin ㉖ of fed to pin ⑱ of IC301?
NO
Is TRICK(H) supplied to anode of D510 at zero volt?
YES
YES
NO
Check IC301
Check TRICK(H)
Is the modulated luminance signal from pin ⑱ of IC301 fed to pin ⑮ of IC401?
NO
Check R304, C314
YES
TO PRE-AMP CIRCUIT IN THE REC MODE

* The pin # of IC401 is changed according to SET.

DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

E. TROUBLESHOOTING OF COLOUR IN THE RECORD MODE.

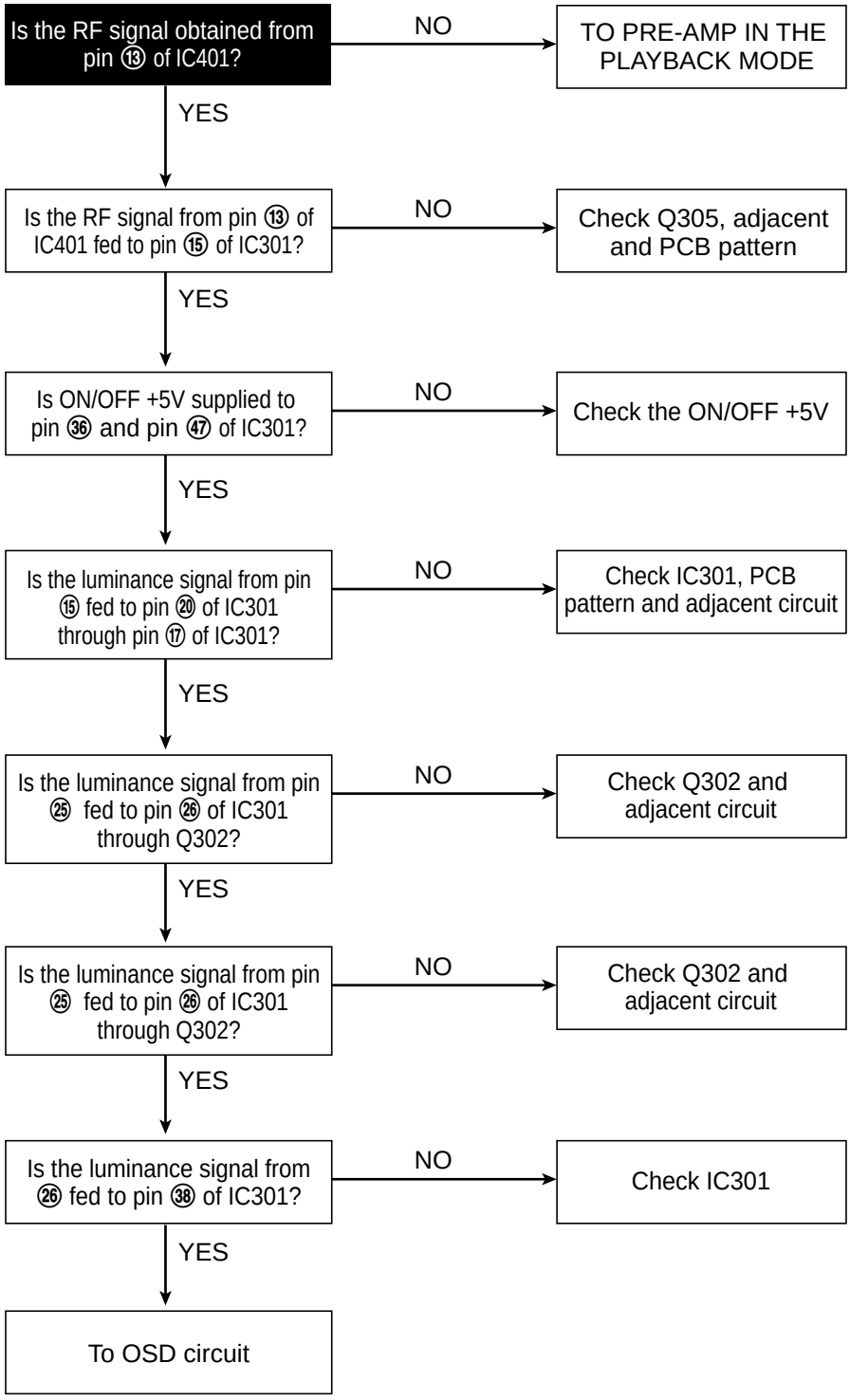

Is ON/OFF 5V supplied to pin ㊱ and pin ㊼ of IC301?
NO
Check the ON/OFF +5V
YES
Is the obtained from pin ㉞ of IC301?
NO
TO EE MODE
YES
Is the color signal from pin ㊿ of IC301 to pin ㊷ of IC301?
NO
Check IC302, PCB and adjacent circuit
YES
Is the down converted color signal from pin ⑭ of IC301 fed to pin ⑯ of IC401 through C315?
NO
Check IC302, PCB and adjacent circuit
YES
NO
YES
Check IC301
Changed damaged components
TO PRE-AMP CIRCUIT IN THE RECORD MODE

* The pin # of IC401 is changed according to SET.

DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

F. TROUBLESHOOTING OF LUMINANCE IN THE PLAYBACK MODE.

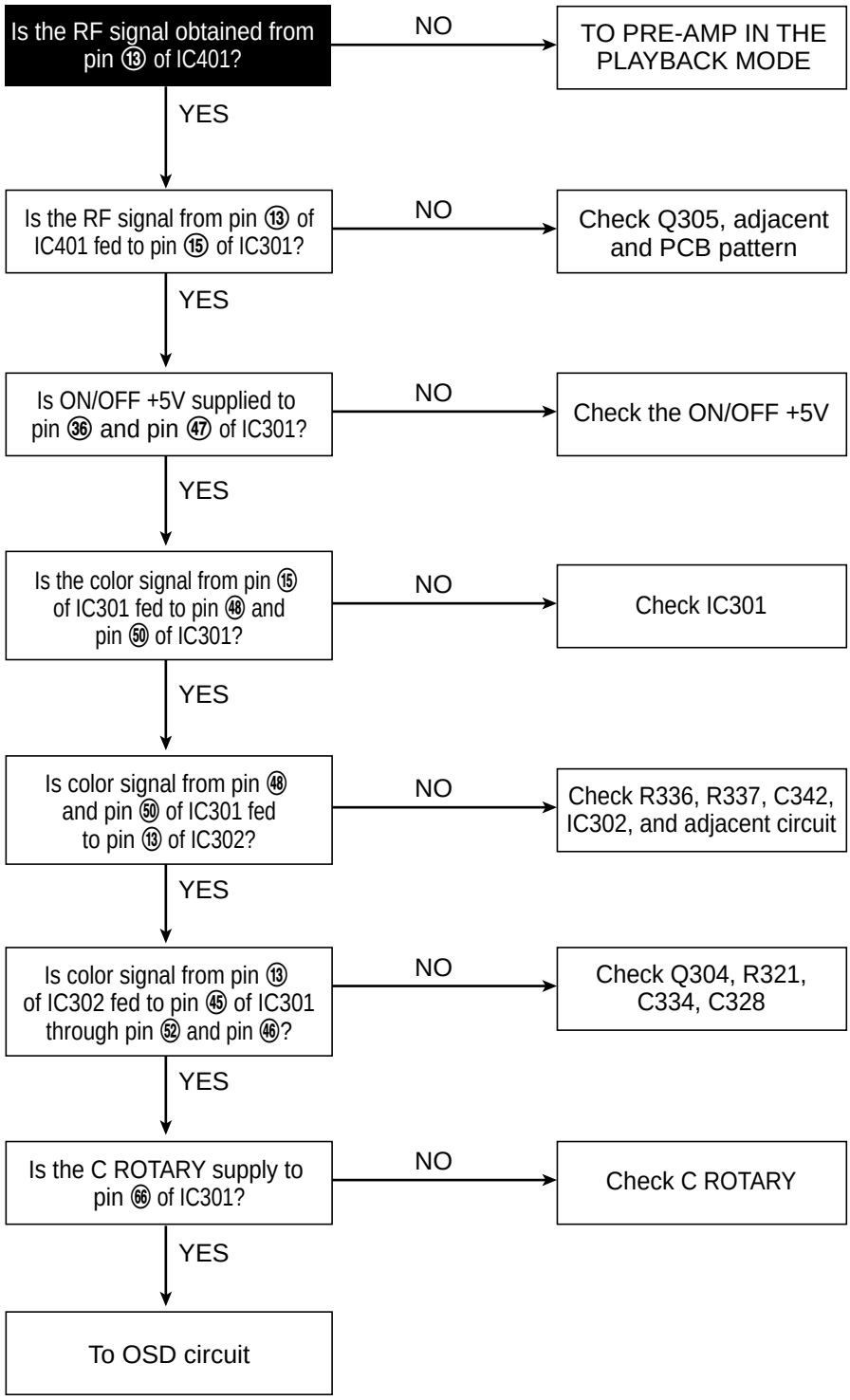

Is the RF signal obtained from pin ⑬ of IC401?
NO
TO PRE-AMP IN THE PLAYBACK MODE
YES
Is the RF signal from pin ⑬ of IC401 fed to pin ⑮ of IC301?
NO
Check Q305, adjacent and PCB pattern
YES
Is ON/OFF +5V supplied to pin ㊱ and pin ㊼ of IC301?
NO
Check the ON/OFF +5V
YES
Is the luminance signal from pin ⑮ fed to pin ⑳ of IC301 through pin ⑰ of IC301?
NO
Check IC301, PCB pattern and adjacent circuit
YES
Is the luminance signal from pin ㉕ fed to pin ㉖ of IC301 through Q302?
NO
Check Q302 and adjacent circuit
YES
Is the luminance signal from pin ㉕ fed to pin ㉖ of IC301 through Q302?
NO
Check Q302 and adjacent circuit
YES
Is the luminance signal from ㉖ fed to pin ㊳ of IC301?
NO
Check IC301
YES
To OSD circuit

* The pin # of IC401 is changed according to SET.

DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

G. TROUBLESHOOTING OF COLOUR IN THE PLAYBACK MODE.

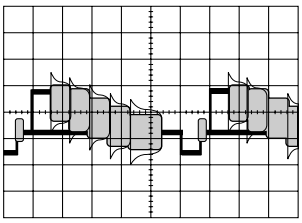

Is the RF signal obtained from pin ⑬ of IC401?
NO
TO PRE-AMP IN THE PLAYBACK MODE
YES
Is the RF signal from pin ⑬ of IC401 fed to pin ⑮ of IC301?
NO
Check Q305, adjacent and PCB pattern
YES
Is ON/OFF +5V supplied to pin ㊱ and pin ㊼ of IC301?
NO
Check the ON/OFF +5V
YES
Is the color signal from pin ⑮ of IC301 fed to pin ㊽ and pin ㊿ of IC301?
NO
Check IC301
YES
Is color signal from pin ㊽ and pin ㊿ of IC301 fed to pin ⑬ of IC302?
NO
Check R336, R337, C342, IC302, and adjacent circuit
YES
Is color signal from pin ⑬ of IC302 fed to pin ㊺ of IC301 through pin ㊷ and pin ㊻?
NO
Check Q304, R321, C334, C328
YES
Is the C ROTARY supply to pin ㊻ of IC301?
NO
Check C ROTARY
YES
To OSD circuit

* The pin # of IC401 is changed according to SET.

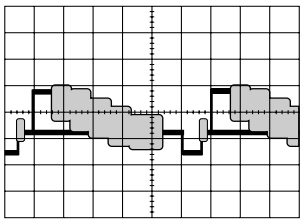
DV-K884W (6 Heads) : LA70020 (36PIN DIP)
DV-K484W (4 Heads) : LA70011 (24PIN DIP)
DV-K284W (2 Heads) : LA70001 (24PIN DIP)

¡ **NOTE:** Refer to 74page, Hi-Fi/PRE-AMP CIRCUIT DIAGRAM.

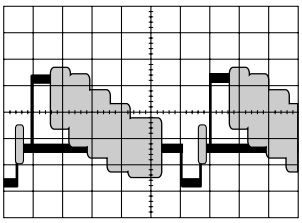
5-1. WAVEFORMS IN THE EE MODE (COLOR BAR INPUT)



① Pin 30 of IC301
(SECAM color bar input :
1.0Vp-p

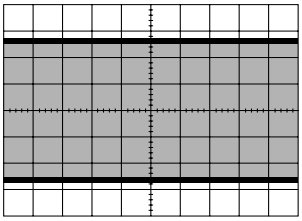


② Pin 30 of IC301
(PAL color bar input :
1.0Vp-p)

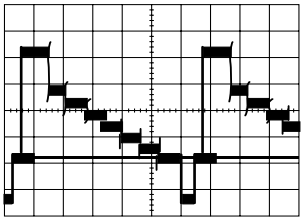


③ Pin 38 of IC301
(PAL color bar output :
2.0Vp-p)

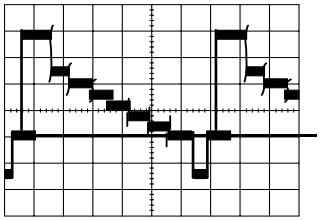
5-2. WAVEFORMS OF THE LUMINANCE IN THE RECORD MODE(COLOR BAR INPUT)



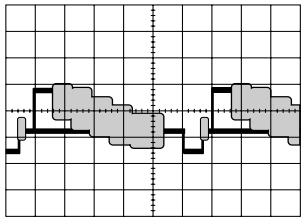
④ Pin 18 of IC301(PAL)
(REC luminance :
300mVp-p)



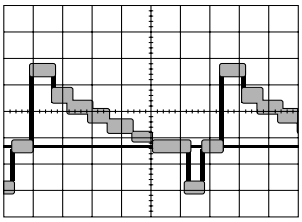
⑥ Pin 25 of IC301
(0.5Vp-p)



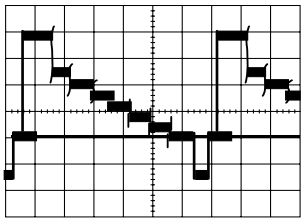
⑦ Pin 26 of IC301
(0.5Vp-p)



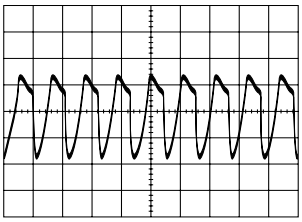
⑧ Pin 35 of IC301
(Color bar input :
1.0Vp-p)



⑨ Pin 40 of IC301
(0.4Vp-p)

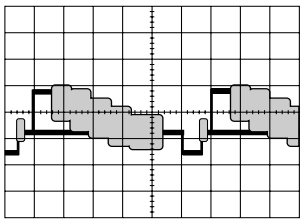


⑩ Pin 42 of IC301
(0.4Vp-p)

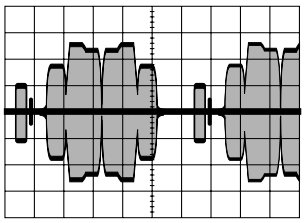


⑪ Pin 10 of IC302
(fsc=3.579545MHz :
350mVp-p)

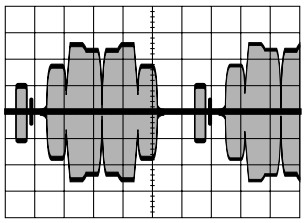
5-3. WAVEFORMS OF THE PAL COLOR IN THE RECORD MODE (COLOR BAR INPUT)



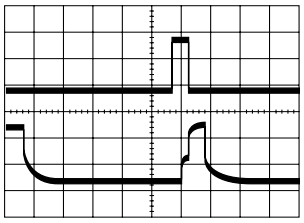
⑫ Pin 35 of IC301
(PAL color input :
1.0Vp-p)



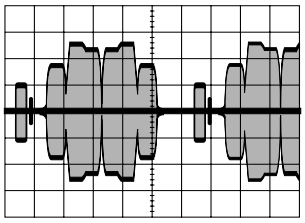
⑬ Pin 48 and 50 of IC301
(300mVp-p)



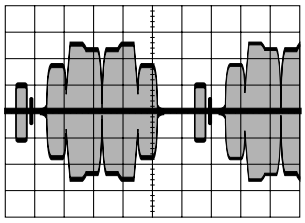
⑭ Pin 52 of IC301
(400mVp-p)



⑮ Pin 37 of IC301
(C.SYNC : 2Vp-p)

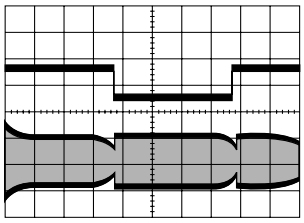


⑯ Pin 14 of IC301
(300mVp-p)

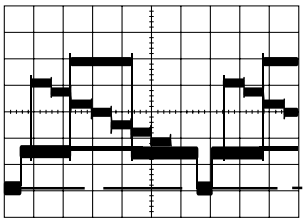


⑰ Pin 10 of IC401
(REC PAL color :
300mVp-p)

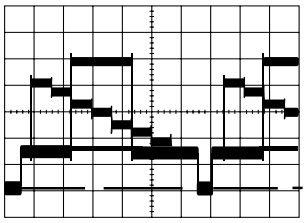
5-4. WAVEFORMS OF THE LUMINANCE IN THE PB MODE (DP-1 TEST TAPE)



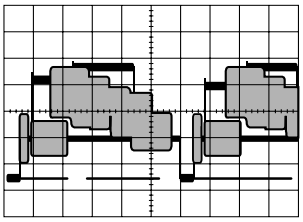
㉓ UP : Pin 66 of IC301(color
rotary : 1Vp-p
DOWN : Pin 20 of IC301
(ENVE : 0.5Vp-p)



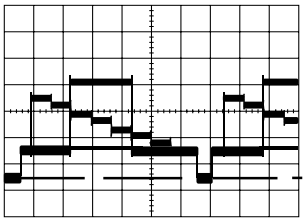
㉔ Pin 25 of IC301
(0.5Vp-p)



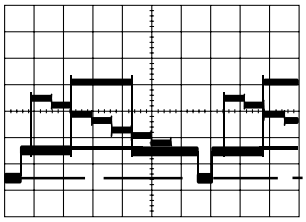
㉕ Pin 26 of IC301
(0.5Vp-p)



㉖ Pin 38 of IC301
(Video out : 2.0Vp-p)

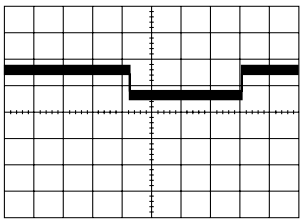


㉗ Pin 40 of IC301
(400mVp-p)

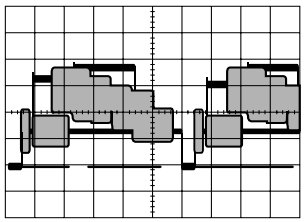


㉘ Pin 42 of IC301
(300mVp-p)

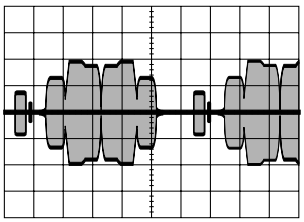
5-5. WAVEFORMS OF THE PAL COLOR IN THE PB MODE (DP-1 TEST TAPE)



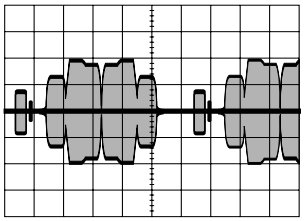
㉙ UP : Pin 66 of IC301(color) rotary : 0.5Vp-p)
DOWN : Pin 20 of IC301
(500mVp-p)



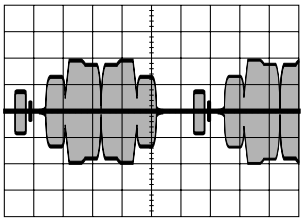
㉚ Pin 37 of IC301
(Video out : 2.0Vp-p)



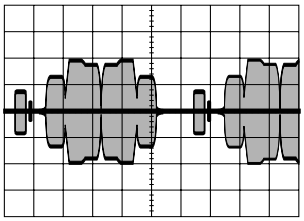
㉛ Pin 48 and 50 of IC301
(240mVp-p)



㉜ Pin 52 of IC301
(300mVp-p)



㉝ Pin 45 of IC301
(500mVp-p)



㉞ Pin 46 of IC301
(500mVp-p)

SECTION 6. μ-COM PORT

IC 501 (168KKVZGTS)

*P: Pulse, H: High, L: Low
A/D: A/D convert port, serial: serial Data/Clock

No.	NAME	I/O	ASSIGNMENT	ACTIVE	CN
1	IF ON(H)	O	RF MODE 'H' OUTPUT OTHERWISE 'L' OUTPUT	H	PIF
2	AUDIO MUTE(H)	O	AUDIO MUTE H OUTPUT	H	A/V 1CHIP
3	D. PWM	O	DRUM MOTOR CONTROL PWM OUTPUT	P	DECK(DRUM)
4	C. PWM	O	CAPSTAN MOTOR CONTROL PWM OUTPUT	P	DECK(CAP)
5	T REEL	I	TAKE-UP REEL PULSE INPUT	P	DECK(REEL)
6	S REEL	I	SUPPLY REEL PULSE INPUT	P	DECK(REEL)
7	MESECAM(H)	I	MESECAM MODE INPUT	H	A/V 1CHIP
8	V/SC DATA	O	VIDEO SERIAL DATA OUTPUT(I^2C BUS)	SERIAL	A/V 1CHIP
9	V/SC CLK	O	VIDEO SERIAL CLK OUTPUT(I^2C BUS)	SERIAL	A/V 1CHIP
10	Hi-Fi DET(H)	I	Hi-Fi DET. DATA INPUT	H	Hi-Fi
11	REMOCON IN	I	REMOCON DATA INPUT	P	REMOCON RECEIVER
12	A. SW	O	Hi-Fi A. SWP OUTPUT	P	Hi-Fi/PRE-AMP
13	NC				
14	Q V SYNC	O	PINOUT THIS SIGNAL DURING 'TRICK' MODES	PULSE/L	A/V 1CHIP
15	C. ROTARY	O	2HD:$\overline{\text{SW PULSE}}$ 4HD:EXCLUSIVE OR OUTPUT OF HEAD AMP SW & V. SW PULSE	P	A/V 1CHIP
16	HEAD AMP SW	O	TO SELECT SP H'D OR LP H'D SP H'D:L LP H'D:H • 4HD PLAY: SP L, LP H; CUE/REV: SP P, LP P	P	A/V 1CHIP / PRE-AMP
17	ENVE COMP	I	COMPARE SP ENVE WITH SP ENVE SP:L, LP:H	P	PRE-AMP
18	V. SW	O	TO SELECT R/L CHANNEL (VIDEO H'D)	P	PRE-AMP
19	NC				
20	SLOW STEP CONTROL	O	CONTROL SIGNAL TO PROTECT AGAINST ABNORMAL ACTION DURING SLOW MODE	P	CTL AMP
21	REC CTL	O	CTL PULSE OUT IN REC MODE	P	DECK(CTL)
22	CAP FG	I	CAPSTAN FG INPUT	P	DECK(CAP)
23	DRUM PG	I	DRUM PG INPUT	P	DECK(DRUM)
24	DRUM FG	I	DRUM FG INPUT	P	DECK(DRUM)
25	PB CTL	I	CTL PULSE INPUT	P	CTL AMP
26	VCC		BACK UP 5V		

<table>
<tr><th>No.</th><th>NAME</th><th>I/O</th><th>ASSIGNMENT</th><th>ACTIVE</th><th>CN</th></tr>
<tr><td>27</td><td>TRICK(H)</td><td>O</td><td>ENABLES TO CONTROL HA SW PULSE WHEN SPECIAL OPERATIONS (CUE/REV/STILL) ARE OPERATING</td><td>H</td><td>Hi-Fi/PRE-AMP</td></tr>
<tr><td>28</td><td>TV/VCR</td><td>O</td><td>TV/VCR MODE SWITCHING ON TV
TV MODE:H, VCR MODE:L
ACTIVE IN DIGITRON</td><td>H/L</td><td>PIF</td></tr>
<tr><td>29</td><td>ACK OUT</td><td>I</td><td>NTSC COLOR KILLER OUT</td><td>H/L</td><td>A/V 1CHIP</td></tr>
<tr><td>30
31</td><td>L/M R
L/M F</td><td>O
O</td><td><table><tr><th></th><th>LM F</th><th>LM R</th><th>OUTPUT</th></tr><tr><td>LOADING MOTOR</td><td>H</td><td>L</td><td>FORWARD</td></tr><tr><td>REVERSE DRIVING</td><td>L</td><td>H</td><td>REVERSE</td></tr><tr><td>LOADING MOTOR</td><td>H</td><td>H</td><td rowspan="2">BRAKE</td></tr><tr><td>FORWARD DRIVING</td><td>L</td><td>L</td></tr></table></td><td>L/H</td><td>L/MC</td></tr>
<tr><td>32
33
34
44</td><td>P42/ØOUT
P41
P41
P32</td><td>I</td><td>CAM DATA INPUT
* MODE SWITCHING TABLE<table><tr><th>CAM A</th><th>CAM B</th><th>CAM C</th><th>CAM D</th><th>MODE</th></tr><tr><td>L</td><td>H</td><td>H</td><td>H</td><td>EJECT</td></tr><tr><td>L</td><td>H</td><td>L</td><td>H</td><td>STAND BY</td></tr><tr><td>H</td><td>H</td><td>L</td><td>H</td><td>REV</td></tr><tr><td>H</td><td>H</td><td>L</td><td>L</td><td>STOP</td></tr><tr><td>H</td><td>H</td><td>H</td><td>L</td><td>PLAY</td></tr><tr><td>H</td><td>L</td><td>L</td><td>L</td><td>SLOW</td></tr><tr><td>H</td><td>L</td><td>H</td><td>H</td><td>BRAKE</td></tr><tr><td>H</td><td>L</td><td>H</td><td>L</td><td>FF/REW</td></tr><tr><td>H</td><td>H</td><td>H</td><td>H</td><td>CAM OFF</td></tr></table></td><td>L</td><td>DECK(CAM)</td></tr>
<tr><td>35</td><td>NUB</td><td>GND</td><td></td><td></td><td></td></tr>
<tr><td>36</td><td>NUA</td><td>GND</td><td></td><td></td><td></td></tr>
<tr><td>37</td><td>REST(L)</td><td>I</td><td>RESET INPUT</td><td>L</td><td></td></tr>
<tr><td>38</td><td>XIN</td><td>I</td><td>16MHz OSC IN</td><td></td><td></td></tr>
<tr><td>39</td><td>XOUT</td><td>O</td><td>16MHz OSC OUT</td><td></td><td></td></tr>
<tr><td>40</td><td>CLK SEL</td><td>I</td><td>AFTER RESET, A SYSTEM CLOCK IS SELECTED DEPENDING UPON CURRENT STATE:
IF L: 32.768KHz
H:16MHz IS SELECTED</td><td>L/H</td><td></td></tr>
<tr><td>41</td><td>Vss</td><td></td><td>GND</td><td></td><td></td></tr>
<tr><td>42</td><td>XCIN</td><td>I</td><td>32.768KHz OSC IN</td><td></td><td></td></tr>
<tr><td>42</td><td>XCIN</td><td>O</td><td>32.768KHz OSC OUT</td><td></td><td></td></tr>
<tr><td>44</td><td>CAM D</td><td>I</td><td>SEE THE PRECEDING PAGE</td><td>L</td><td>DECK(CAM)</td></tr>
<tr><td>45</td><td>NC</td><td></td><td></td><td></td><td></td></tr>
<tr><td>46</td><td>CAP I LIMIT</td><td>O</td><td>THIS PORT IS USUALLY OPEN BUT OUTPUTS THE CAPSTAN STOP STATE OF FRAME ADVANCE</td><td>L</td><td>DECK</td></tr>
<tr><td>47</td><td>CAP F(L)/R(H)</td><td>O</td><td>CAPSTAN MOTOR FORWARD(L)/REVERSE(H)</td><td>L/H</td><td>DECK (CAPSTAN)</td></tr>
<tr><td>48</td><td>POWER ON(L)</td><td>O</td><td>POWER ON/OFF CONTROL PORT</td><td>L</td><td>POWER</td></tr>
</table>

No.	NAME	I/O	ASSIGNMENT	ACTIVE	CN
49	KEY IN1	I	KEY & OPTION DATA INPUT	P	
50	KEY IN2	I	KEY & OPTION DATA INPUT	P	
51	S0	O	SEGMENT 0	P	FLD
52	S1	O	SEGMENT 1	P	FLD
53	S2	O	SEGMENT 2	P	FLD
54	S3	O	SEGMENT 3	P	FLD
55	S4	O	SEGMENT 4	P	FLD
56	S5	O	SEGMENT 5	P	FLD
57	S6	O	SEGMENT 6	P	FLD
58	S7	O	SEGMENT 7	P	FLD
59	S8	O	SEGMENT 8	P	FLD
60	S9	O	SEGMENT 9	P	FLD
61	S10	O	SEGMENT 10	P	FLD
62	S11	O	SEGMENT 10	P	FLD
63	S12	O	SEGMENT 10	P	FLD
64	S13	O	SEGMENT 10	P	FLD
65	S14	O	SEGMENT 10	P	FLD
66	S15	O	SEGMENT 10	P	FLD
67	G0	O	GRID 0	P	FLD
68	G1	O	GRID 0	P	FLD
69	G2	O	GRID 0	P	FLD
70	G3	O	GRID 0	P	FLD
71	G4	O	GRID 0	P	FLD
72	G5	O	GRID 0	P	FLD
73	NTSC SP(H)	O	NTSC SP EE/REC MODE	H	A/V 1CHIP
74	OSC CONTROL	O	AUDIO OSC CONTROL PWR ON:H PWR OFF:L		
75	Vee		-24V		
76	Vcc		BACK UP 5VL		
77	OSD DATA	O	OSD, SERIAL DATA OUT	SERVAL	OSD
78	OSD STB	O	OSD CHIP SELECT OUTPUT	H	OSD
79	OSD CLK	O	OSD, SERIAL CLK OUT	SERIAL	OSD
80	BIL(L)	I	BILINGUAL DATA INPUT	L	IF
81	Vcc		BACK UP 5V		
82	Vret		A/D REFERENCE 5V		
83	VS PWM	O	PWM OUT FOR CHANNEL SELECT DURING RF MODE	P	PIF
84	REC SAFETY	I	REC SAFETY TAB IS DETECTED L STATE SO THAT RECOPRDING IS INHIBITED	L	REC SA SW

No.	NAME	I/O	ASSIGNMENT	ACTIVE	CN
85	POWER FAIL(L)	I	WHEN POWER IS DISCONNECTED THIS PORT DETECTS POWER FAILURE AND THEN GOES INTO POWER COMPENSATION MODE	L	
86	START SENSOR	I	TAPE START SENSOR DATA INPUT	A/D	START SENSOR
87	DRUM SEL	I	<table><tr><th></th><th>SP</th><th>LP</th><th>A/D INPUT</th><th>R501</th></tr><tr><td>PAL 4H'D</td><td>45/50</td><td>30/30</td><td>2.5~3.125</td><td>13K</td></tr><tr><td>PAL 2H'D</td><td>40/40</td><td>40/40</td><td>1.25~1.875</td><td>4.7K</td></tr></table>	A/D	
88	AFT	I	AFT ANALOG DATA INPUT FOR AUTO FINE TUNING	A/D	PIF
89	AGC	I	AGC ANALOG DATA INPUT FOR AUTO CH. SETTING	AD	PIF
90	END SENSOR	I	TAPE END SENSOR DATA INPUT	L	END SENSOR
91	PATH ADJUST	I	USE FOR PATH ADJUST	A/D	PATH JIG
92	DC ENVE	I	DC ENVE DATA INPUT	A/D	A/V 1CHIP
93	C. SYNC	I	COMPOSITE SYNC DATA INPUT	P	VIDEO
94	IF SC DATA E^2PROM DATA	O	MOD. SERIAL DATA OUT(I^2C BUS)	SERIAL	PIF
95	IF SC CLK E^2PROM CLK	O	MOD. SERIAL CLOCK OUT (I^2C BUS)	SERIAL	PIF
96	UHF(H)	O	USE FOR UHF BAND SELECT	H	PIF
97	VH(H)	O	USE FOR VHF HIGH BAND SELECT	H	PIF
98	VL(H)	O	USE FOR VHF LOW BAND SELECT	H	PIF
99	ST(L)	I	STEREO DATA INPUT	L	PIF
100	NT(H)	O	NTSC (H) / PAL (L) OUTPUT FOR RF MODE	H	PIF

SECTION 7. VOLTAGE CHARTS

Voltage Charts

TDA9814T for IF IC (IC101)

MODE / PIN NO.	PAL- B/G TWO CARRIER	NTSC	REMARKS
1	3.3	3.3	Conditions
2	3.3	3.3	:EE MODE
3	0.8	0.8	
4	1.1	1.1	
5	2.5	2.5	
6	2.7	2.7	
7	3.0	3.0	
8	2.2	2.2	
9	3.5	3.5	
10	2.3	2.3	
11	2.3	2.3	
12	2.2	1.6	
13	2.0	2.0	
14	1.9	1.9	

MODE / PIN NO.	PAL- B/G TWO CARRIER	NTSC	REMARKS
15	2.7	2.7	Conditions
16	X	X	:EE MODE
17	2.0	2.0	X:Variable
18	1.9	1.9	
19	1.9	1.9	
20	2.5	2.5	
21	2.7	2.7	
22	2.7	2.7	
23	2.4	2.4	
24	0	0	
25	X	X	
26	4.8	4.8	
27	3.3	3.3	
28	3.3	3.3	

TDA9845 for IF IC (IC121)

MODE / PIN NO.	PAL- B/G TWO CARRIER	REMARKS
1	5.1	Conditions
2	0	:EE MODE
3	4.0	
4	3.3	
5	2.5	
6	2.5	
7	2.5	
8	2.5	
9	2.5	
10	2.5	

MODE / PIN NO.	PAL- B/G TWO CARRIER	REMARKS
11	2.5	Conditions
12	2.5	:EE MODE
13	2.5	
14	BIL:L, STEREO & MONO:H	
15	STEREO:L, BIL & MONO:H	
16	0	
17	2.5	
18	5.0	
19	3.3	
20	0	

LA71501BM for VIDEO/AUDIO IC (DC:Voltage) (IC301)

PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	2.44	2.40	21	0.35	0.39	41	0.06	0.06	61	2.05	2.02
2	0.01	0.00	22	1.56	2.25	42	2.00	1.97	62	0.21	0.26
3	2.44	2.41	23	0.02	1.80	43	0.48	0.47	63	4.48	4.48
4	1.03	0.05	24	2.41	1.82	44	1.83	1.84	64	4.75	4.75
5	1.35	5.51	25	2.15	2.08	45	1.96	1.95	65	0.31	0.31
6	0.86	0.02	26	30.8	3.03	46	0.03	2.70	66	0.00	0.40
7	2.42	2.39	27	0.00	0.06	47	5.09	5.07	67	0.04	0.04
8	2.46	2.40	28	1.80	0.28	48	2.85	2.84	68	0.06	0.61
9	2.37	2.37	29	1.90	2.16	49	4.42	4.24	69	5.09	5.08
10	2.37	2.37	30	2.11	0.00	50	2.92	2.91	70	0.02	0.00
11	3.07	2.38	31	4.08	4.08	51	4.23	4.25	71	2.39	2.38
12	2.32	2.31	32	1.80	0.28	52	3.22	3.20	72	0.01	0.01
13	1.71	2.08	33	0.58	0.58	53	0.00	0.04	73	2.39	2.38
14	2.95	0.31	34	2.17	0.00	54	2.15	2.09	74	2.41	2.40
15	0.00	3.25	35	3.14	3.16	55	5.15	5.13	75	2.39	2.38
16	2.56	2.59	36	5.09	5.06	56	5.15	5.13	76	5.15	5.14
17	3.32	1.64	37	0.59	0.59	57	0.01	0.00	77	2.49	2.48
18	2.11	1.56	38	1.70	1.78	58	0.19	3.54	78	0.00	0.00
19	4.30	0.08	39	3.19	3.18	59	2.46	2.09	79	2.40	2.38
20	3.14	3.05	40	3.01	3.00	60	4.07	4.03	80	5.14	0.15

12BKK8Z7AL for OSD IC DC(AC):Volt (IC001)						LC89978M for CCD IC (IC302)		
PIN NO.	REC	PB	PIN NO.	REC	PB	PIN NO.	REC	PB
1	0.00	0.00	16	1.99	2.47	1	2.60	2.60
2	2.62	2.62	17	5.00	5.01	2	5.04	5.05
3	2.63	2.64	18	2.00	2.43	3	2.59	2.59
4	0.00	0.00	19	2.03	2.39	4	0.00	0.01
5	0.00	0.00	20	3.00	3.15	5	2.54	2.53
6	0.00	0.00	21	2.00	2.00	6	0.00	0.00
7	0.00	0.00	22	0.00	0.00	7	1.75	1.73
8	(2.2)	(2.2)	23	2.75	2.75	8	9.18	9.18
9	(2.0)	(2.0)	24	2.76	2.76	9	2.17	2.18
10	(2.2)	(2.2)	25	2.83	2.82	10	0.83	0.83
11	5.00	5.01	26	2.82	2.82	11	0.04	0.04
12	5.00	5.01	27	2.64	2.64	12	0.42	0.42
13	5.00	5.01	28	2.64	2.64	13	1.97	1.97
14	5.00	5.01	29	0.00	0.00	14	0.00	0.01
15	4.50	4.50	30	5.00	5.00			

ELECTRO CAPACTIOR

LOC	POSITIVE	NEGATIVE	LOC	POSITIVE	NEGATIVE
C002	5.02	0.00	C309	2.93	0.00
C007	2.83	2.76	C315	2.93	1.40
C012	4.51	0.00	C317	1.64	0.00
C008	2.75	1.71	C320	4.05	0.00
C201	0.00	0.00	C322	3.11	2.21
C203	2.38	0.01	C324	5.03	0.00
C207	5.16	0.00	C325	1.94	0.00
C208	2.38	C326	3.05	2.16	
C212	5.93	5.44	C327	1.78	0.01
C216	0.84	0.01	C330	5.03	0.01
C219	2.42	0.01	C331	4.17	0.01
C222	5.93	0.01	C333	4.18	0.01
C223	2.04	0.01	C337	2.15	0.01
C301	1.80	0.00	C343	2.37	1.85

BH7804K for Hi-Fi IC(IC251)

PIN NO.	REC	PB	PIN NO.	REC	PB
1	0.01	0.00	23	0.00	0.00
2	0.00	0.00	24	0.00	0.00
3	0.00	0.00	25	-4.82	-5.01
4	0.00	0.00	26	0.00	0.00
5	4.63	4.51	27	-4.95	-4.47
6	4.50	4.37	28	0.00	0.00
7	0.00	0.00	29	0.00	0.00
8	2.45	2.45	30	0.00	0.00
9	-4.85	-5.01	31	0.00	0.00
10	0.00	0.00	32	0.00	0.00
11	0.00	0.00	33	0.00	0.00

PIN NO.	REC	PB	PIN NO.	REC	PB
12	0.00	0.00	34	0.00	0.00
13	0.00	0.00	35	2.54	2.4
14	0.73	0.00	36	5.01	5.04
15	0.00	0.00	37	0.00	0.00
16	0.00	2.01	38	0.00	0.00
17	2.50	2.50	39	-5.02	-5.02
18	5.06	5.04	40	0.00	0.00
19	0.00	0.00	41	0.00	0.00
20	2.62	2.65	42	-5.13	-5.13
21	3.29	3.30	43	0.00	0.00
22	0.00	0.00	44	0.00	0.00

6209 for M/T DRIVE IC (IC502)

PIN NO.	REC	PB
1	0	0
2	0.52	0.52
3	0.9	0.84
4	6.1	6.1
5	0	0
6	0	0
7	11.3	11.2
8	11.3	11.2
9	0.9	0.86
10	0.52	0.52

24LC08B for EEPROM IC (IC503)

PIN NO.	REC	PB
1	0	0
2	0	0
3	0	0
4	0	0
5	5.15	4.95
6	5.1	4.75
7	0	0
8	5.26	5.3

A7033P for RESET IC (IC504)

PIN NO.	REC	PB
1	5.25	5.25
2	0	0
3	5.25	5.25

MC4558C for OPAMP IC (IC505)

PIN NO.	REC	PB
1	2.89	3.4
2	3.04	3.2
3	3.04	3.2
4	0	0
5	5.93	6.0
6	3.04	4.4
7	3.04	3.2
8	3.04	3.4

A7033P for RESET IC (IC504)

MODE / NO.	PAL	REMARKS
1	0	Conditions
2	4.7	:EE MODE
3	4.7	
4	0	
5	0.4	
6	5.0	
7	2.5	

MODE / NO.	PAL	REMARKS
8	0	Conditions
9	2.7	:EE MODE
10	2.6	
11	2.7	
12	1.5	
13	1.5	
14	5.0	

A7033P for RESET IC (IC504)

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PB	REC	PB	REC	PB	REC
Q501	0	0	0	0	4.7	4.7
Q502	6	06	6	06	5.3	5.3
Q503	0	0	0	0	0.76	0.76
Q504	12.5	12.3	12.5	12.3	11.8	11.6
Q506	0	0	0	0	0.76	0.76

AV SW PART TR

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PB	REC	PB	REC	PB	REC
Q601	2.30	2.40	0.00	0.00	.60	1.70
Q602	5.30	5.30	0.00	0.00	4.60	4.60
Q603	5.40	5.40	0.00	0.00	4.70	4.70
Q604	3.20	2.40	0.00	0.00	2.50	1.75
Q605	5.40	5.40	0.00	0.00	4.70	4.70
Q606	5.40	5.40	0.00	0.00	4.70	4.70
Q607	12.3	12.2	12.3	0.00	0.00	12.2
Q609	0.00	0.00	5.20	5.30	0.00	0.00

VIDEO PART TR (PAL MODE)

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PB	REC	PB	REC	PB	REC
Q001	2.64	2.61	0	0	1.94	1.91
Q301	0.83	2.1	4.33	3.11	1.47	2.77
Q302	1.58	1.62	5.2	5.21	2.22	2.25
Q303	2.02	2.02	0.01	0	1.38	1.38
Q304	1.23	1.23	5.15	5.17	1.86	1.86
Q307	1.13	1.13	5.19	5.21	1.76	1.76
Q305	1.15	1.16	4.61	4.62	1.77	1.78

IF MODULE PART TR (EE MODE)

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PAL-B/G TWO CARRIER	NTSC	PAL-B/G TWO CARRIER	NTSC	PAL-B/G TWO CARRIER	NTSC
Q101	0.3	0.3	7.0	7.0	1.0	1.0
Q102	1.6	1.6	5.1	5.1	2.2	2.2
Q103	9.3	9.3	1.9	9.3	9.3	8.6
Q104	0	0	9.3	0	0	5.1
Q105	0	0	0	2.4	4.3	0
Q106	1.9	2.9	2.7	2.9	1.9	9.3
Q107	1.9	2.0	2.0	2.0	1.9	9.3
Q108	2.0	2.0	1.9	2.0	1.9	9.3
Q109	1.9	2.0	1.9	2.0	1.9	9.3
Q110	0	0	0	0	0	5.1
Q111	0	0	4.3	0	0	5.1
Q113	0	0	2.7	0	0	5.1
Q121	0	0	5.1	5.1	0	0

AUDIO PART TR

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PB	REC	PB	REC	PB	REC
Q201	5.4	1.82	5.9	5.46	5.9	2.41
Q202	5.19	5.2	5.16	-28.77	4.53	5.2
Q203	0	-23.44	0.01	0	0.68	-28.26
Q204	0	-23.44	0	0	0.7	-28.58
Q205	0	0.02	5.43	1.64	0.02	0.86

PIF PART TR (EE MODE)

PORTS / LOC.		EMITTER	COLLECTOR	BASE	REMARKS
Q171		9.4	X	X	
Q172		9.4	X	X	
Q173		9.4	X	X	
Q174		0	X	X	
Q175		0	X	X	
Q176		0	X	X	
Q177		5.1	5.1	4.4	
Q178		0	0	3.9	
Q179		9.8	9.8	9.0	
Q180		0	0	4.0	
Q601	TV MODE	5.04	0	5.18	PHONO
	VCR MODE	5.0	4.97	4.31	
Q602	TV MODE	0	0	5.21	ONE SCART
	VCR MODE	0	12.5 (non-connection TV only)	0	

*X:Variable

POWER PART TR

PORTS / LOC.	EMITTER		COLLECTOR		BASE	
	PB	REC	PB	REC	PB	REC
Q811	10.43	10.4	12.6	12.2	11.0	11.0
Q816	10.43	10.4	12.6	12.2	11.0	11.0
Q812	5.18	0.25	5.94	6.4	5.88	0.06
Q815	5.18	0.25	5.94	6.4	5.88	0.06
Q813	0.0	0.0	5.8	0.06	0.0	0.79
Q814	-9.6	-9.7	-17.2	-22.3	-10.25	-10.27

SECTION 8. SERVICE MODE

8-1. SERVICE MODE

ITEM	OSD	REMARKS
¤ Press the [MENU] button to go to [MAIN MENU] screen and press the number 484 in sequence then go to [SERVICE MODE] screen. ¤Ł Display language is ENGLISH only. ¤Ø Maintain the selected mode continuously. ¤Œ Composition of the SERVICE MODE is as follows. 1) SERVICE MODE FOR REPAIR 2) TIMER CHECK MODE 3) CHANGE OF EEPROM DATA 4) Hi-Fi CHECK MODE ¤º Everlasting data memory at E²PROM	¤ **MAIN MENU** ¤A Timer Program Timer Review VCR Setup **PR+/-:select** **OK: confirm MENU:end** **WELCOME TO SVC MODE!** **(M3775M7H-159GP)** /U SVC MODE FOR REPAIR /V TIMER CHECK MODE /W CHANGE OF EEPROM DATA /X Hi-Fi CHECK MODE * 0 EXIT ***Note:** only for DV-K884W, DV-K864W, DV-K824W, DV-K8K4W	

8-2. SVC MODE FOR REPAIR

1. ERROR CHECK MODE

ITEM	OSD	REMARKS
¤ Press the number 1 button, then OSD ¤ is displayed in the initial SVC mode screen.	¤ **SVC MODE FOR REPAIR** /U DECK JIG CONNECTION MODE (OFF) /V EE MODE WITHOUT DECK MODE (OFF) /W ERROR CHECK MODE 0 RETURN * ERROR CHECK MODE	
¤Ł Press the number 3 button, then OSD ¤Ł is displayed in the SVC MODE FOR REPAIR screen. It can be selected in TAPE OUT state only.	¤Ł **ERROR CHECKING** CHECKING PLEASE WAIT... * “CHECKING” is blinks for 5 seconds.	
¤Ø PAL TEST TAPE is inserted after guide message is appeared, PLAY ¤A CUE ¤A STILL ¤A SLOWW ¤A F.F ¤A REW ¤A PLAY ¤A REV ¤A STOP operations are executed automatically and OSD ¤Œwill be displayed. To press 0 button on OSD ¤Œwill be ejected.	¤Ø **ERROR CHECK MODE** PLEASE INSERT A TEST TAPE FOR ERROR CHECK.	
¤Œ The error state is displayed ‘OK’ or ‘NG’ in ERROR CHECK RESULTS screen. * ‘--’ means unchecked state.	¤Œ **ERROR CHECK RESULTS** 1. DRUM :OK 2. CAPSTAN :OK 3. S-RELL :OK 4. T-REEL :OK 5. CAM :OK 6. CTL :NG 7. ENVELOPE :-- 0. RETURN	

2. DECK JIG CONNECTION MODE

ITEM	OSD	REMARKS
¤ Press the number 1 button, OFF ¡Æ ON is toggled in the SVC MODE FOR REPAIR screan. * The initial state is set to OFF mode.		

3. EE MODE WITHOUT DECK

ITEM	OSD	REMARKS
¤ Press the number 2 button, OFF ¡Æ ON is toggled in the SVC MODE FOR REPAIR screan. * The initial state is set to OFF mode.		

8-3. TIMER CHECK MODE

1. FFAST CLOCK OPERATION

ITEM	OSD	REMARKS
* TIME CHECK MODE is used to check the TIMER RECORD/SHOWVIEW RECORD and VFD SEGMENT. ¤ Press the number 2 button, the OSD will be displayed in the initial SVC mode screen. ¤Ł Press the number 1 button, FAST CLOCK OPERATION will be selected in the TIMER CHECK MODE screen. * The clock is operated will 60 times (1Min 1 Sec) ¤Ø Press the number 2 button, the OSD will be displayed in the initial SVC mode screen. * All segments are lit on VFD for 5 seconds.	¤ **TIMER CHECK MODE** /U FAST CLOCK OPERATION /V VFD SEGMENT CHECK 0 RETURN	

8-4. CHANGE OF EEPROM DATA

ITEM	OSD	REMARKS
* CHANGE OF EEPROM DATA MODE is used for change the VIDEO/AUDIO characteristic data. ¤ Press the number 3 button, OSD ¤ will be displayed in the initial SVC mode screen. ¤Ł Press the [¤B] button to move from right to left. ¤Ø Press the [¤A] button to move from upper to lower. ¤Œ Press the [OK] button to confirm the data change. ¤º The data is not changable related to the system. * System data changed by pressing the [SYS. SEL] key.	0 0 0 1 1 1 0 1 A 1 1 1 1 1 1 1 1 1 0 A 2 1 0 0 0 0 0 1 0 A 3 1 0 1 0 0 0 1 0 A 4 1 1 0 1 1 0 1 1 A 5 0 1 0 0 1 0 1 0 A 6 0 0 0 0 1 0 0 0 A 7 1 0 0 1 1 0 0 0 A 8 1 0 0 0 1 0 0 0 A 9 0 RETURN * parts are toggled like as 'A ¤AP¤AM¤AN¤AN¤AA ' by pressing the [SYS. SEL] key	A:AUTO P:PAL M:MESECAM

8-5. CHANGE OF EEPROM DATA IN PB MODE

ITEM	OSD	REMARKS
¤ Press the number 3 button, OSD ¤ will be displayed in PB mode screen. * Press the [REC] button to adjust the PG(6.5H). ¤Ł Press the [¤B] button to move from right to left. ¤Ø Press the [¤A] button to move from upper to lower. ¤Œ Press the [OK] button to confirm the data change. ¤º The data is not changable related to the system.	¤ 0 0 0 1 1 1 0 1 A 1 1 1 1 1 1 1 1 1 0 A 2 1 0 0 0 0 0 1 0 A 3 1 0 1 0 0 0 1 0 A 4 1 1 0 1 1 0 1 1 A 5 0 1 0 0 1 0 1 0 A 6 0 0 0 0 1 0 0 0 A 7 1 0 0 1 1 0 0 0 A 8 1 0 0 0 1 0 0 0 A 9 0 RETURN REC PG(6.5H)	

8-6. CHANGE OF EEPROM DATA IN SLOW MODE

ITEM	OSD	REMARKS
¤ Press the [SLOW] button, OSD ¤ will be displayed in PB mode screen. ¤Ł Press the [¤B/ ¤A] button to adjust the SLOW TRACKING. ¤Ø Press the [¤B] : 0~99 and [¤A] :0~99	¤ 0 0 0 1 1 1 0 1 A 1 1 1 1 1 1 1 1 1 0 A 2 1 0 0 0 0 0 1 0 A 3 1 0 1 0 0 0 1 0 A 4 1 1 0 1 1 0 1 1 A 5 0 1 0 0 1 0 1 0 A 6 0 0 0 0 1 0 0 0 A 7 1 0 0 1 1 0 0 0 A 8 1 0 0 0 1 0 0 0 A 9 0 RETURN REC SLOW 00	

8-7. HI-FI CHECK MODE

ITEM		
¤ Press the number 3 button, OSD ¤ will be displayed the initial SVC mode screen. ¤Ł Press the number 1 key in the ¤ screen, then the auto adjust mode is executed for the Hi-Fi FM carrier. in the screen, binking the “Check..” strings during the adjusting. If the adjustment is finished succesfully, the item displays the “OK”, otherwise “NG”. ¤Ø Press the number 2 key, then you can change the output gain with “-10%¤A0%¤A+10%”. ¤Œ Press the number 3 key, then you can change the output gain with “10.8dB¤A11.5dB¤A12.8dB-¤A14.0dB”. ¤º Press the number 4 key, then you can change the FM L/R mix ratio with “-10.0dB¤A-8.5dB¤A112.5dB-¤A11.5dB”. ¤ Press the number 5 key, then you can set the default values of all items ¤ Press the number 0 key, then the current values are saved at th EEP ROM and quit this mode	**Hi-Fi CHECK MODE** /U AUTO ADJUST OK /V FM DET LEVEL -10% /W OUTPUT GAIN 14.0dB /X FM MIX RATIO -10.0dB /Y HIFI INITIAL DATA 1-5 SELECT 0 RETURN	

8-8. THE METHOD TO INITIALIZE THE EEPROM

1. When [484] is sequentially pressed in MENU mode, the SERVICE mode is activated.
2. Choose “CHANGE OF EEPROM DATA” by pressing [3].
3. The input video signal should be PAL or null signal, and the speed should be SP.
4. Change the 7th and the 8th bits of GROUP 1 to 11 by the [¤B], [¤A], [OK] buttons.
5. The data are stored in EEPROM wihen [0] button is pressed.
6. Pull out the mains power cord.
7. Instantly short the JP056 and JP057 jumpers on MAIN PCB to reset the VCR.
8. Plug in the mains power cord again.

8-9. THE METHOD TO CONTROL THE A/V 1CHP (LA71501BM)SERIAL DATA

1. Access to the SERVICE MODE by pressing [484] buttons sequentially in MAIN MENU.
2. Choose “CHANGE OF EEPROM DATA” by pressing [3].
3. Then the data table which indicates the current video system (PAL/MESECAM/NTSC) and speed (SP/LP/SLP) is displayed on screen, while it detects the system and speed automatically.
4. Select the system and speed using [SYS. SEL] button and [SPEED] button on remote control if you need to change.
5. The cursor on the data table moves from right to left when the [¤B] button is pressed.
6. The cursor on the data table moves from right to down when the [¤B] button is pressed.
7. Data is toggled whenever the [OK] button is pressed on the cursor position.
8. If you need to change the data related to TRICK PLAY, it can be easily accessed in STILL mode.
9. First, the mode of the system detection should be AUTO mode after you change the data, and then if [0] button is pressed after this, the data of the current status are stored in EEPROM, then the SERVICE MODE MENU is displayed.
10. The data corresponding to the system, speed, input selection, trick play are not changed.

* The group indication part on the data table is changed as in order of A1, A2, ... ¤AP1, P2, ... ¤AM1, M2, .. ¤A] A1, A2, ... whenever the [SYS. SEL] button on remote control is pressed, the system detection of which are A(AUTO), P(FORCED PAL), M(FORCED MESECAM) respectively.

* The data changed to the current system according to the input video signal automatiically in case of AUTO mode. and if no signal, if changes to PAL system.

* Adjust the correct system by prssing the [SYS. SEL] button on remote control if the current status of the system is not correspont to the input vodeo signal.

ADDRESS \ BIT	8	7	6	5	4	3	2	1
000 0001 GROUP 1 COMMON	00 AUTO COLOR KILLER (NORMAL) 10 FORCED KILLER 01 FORCED COLOR 11 PROHIBIT		00 AUTO COLOR KILLER (NORMAL) 10 FORCED KILLER 01 FORCED COLOR 11 PROHIBIT		00 LP 10 EP 01 SP/CARRIER SHIFT STOP 11 SP/CARRIER SHIFT		00 REC 10 PB 01 EE 11 REC-0MUTE	
0000 0010 GROUP 2 COMMOM	0 ACK OUT MODE 1 SLD OUT MODE	0 FIELD FREO 60Hz 1 FIELD FREO 50Hz	0 3.59MHz (C) 1 4.43MHz (C)	0 3.59MHz (Y) 1 4.43MHz (Y)	00 X1 (3.7595MHz) 10 X2 (4.433619/3.582056MHz) 01 X3 (3.575611MHz) 11 X2 (43433619/3.582056MHz)AND PB-H OUT		00 NTSC 10 PAL 01 MESECAM 11 SECAM	
0000 0011 GROUP 3 COMMON	000 NCI CTL/DETAIL CTL-1 LIM=MAX 001 NCI CTL/DETAIL CTL-2 010 NCI CTL/DETAIL CTL-3 011 NCI CTL/DETAIL CTL-4 100 NCI CTL/DETAIL CTL-5 101 NCI CTL/DETAIL CTL-6 110 NCI CTL/DETAIL CTL-7 111 NCI CTL/DETAIL CTL-8 LIM=MAX			00 NL CTL-1 -2.5dB 01 NL CTL-2 0dB 10 NL CTL-3 +1.5dB 11 NL CTL-4 +2.5 0dB		0 YNR MODE 1 LNC MODE	00 YNR OFF 10 YNR STANDARD 01 YNR MIDIUM 11 YNR STRONG	
0000 0100 GROUP 4 REC	00 WHITE CLIP LEVEL 180% 01 WHITE CLIP LEVEL 185% 10 WHITE CLIP LEVEL 190% 11 WHITE CLIP LEVEL 195%		0 ANR ON 1 ANR OFF	0 NORMAL X0/VX0 MODE 1 FORCED XO (FREE RUN MODE)	0 REC EQ TRAP 700KHz 1 REC EQ TRAP 1MHZ	0 REC CUT OFF 5.5M 1 REC CUT OFF 5.0M	00 REC EQ R-LPF -3.6dB (2M TO 3.8M) 10 REC EQ R-LPF -2.9dB (2M TO 3.8M) 01 REC EQ R-LPF -2.3dB (2M TO 3.8M) 11 REC EQ R-LPF -1.8dB (2M TO 3.8M)	
000 0101 GROUP 5 COMMON	00 REC FM LEVEL -0.9dB 01 REC FM LEVEL 0dB 10 REC FM LEVEL +0.9dB 11 REC FM LEVEL +1.8dB		0 FM AGC ON 1 FM AGC OFF (THROUGH)	0 NORMAL X0/VX0 MODE 1 FORCED XO (FREE RUN MODE)	00 VIDEO INPUT 3 10 VIDEO INPUT2 01 VIDEO INPUT 1 11 PROHIBIT		00 REC C LEVEL 0dB 10 REC C LEVEL -1.5dB 01 REC C LEVEL -3dB 11 REC C LEVEL -4.5dB	
0000 0110 GROUP 6 PB	000 PB EQ PEAK-1 MAX 001 PB EQ PEAK-2 010 PB EQ PEAK-3 011 PB EQ PEAK-4 MID 100 PB EQ PEAK-5 101 PB EQ PEAK-6 110 PB EQ PEAK-7 111 PB EQ PEAK-8 MAX			0 PB EQ TRAP 700KHz 1 PB EQ TRAP 1MHz	01 PB EQ TRAP 7M 10 PB EQ TRAP 8M 01 PB EQ TRAP 9M 11 PB EQ TRAP 10M		00 PB EQ CARR. 5.0M 10 PB EQ CARR. 5.5M 01 PB EQ CARR. 6.0M 11 PB EQ CARR. 6.5M	
0000 0111 GROUP 7 PB	00 REC FM LEVEL -0.9dB 01 REC FM LEVEL 0dB 10 REC FM LEVEL +0.9dB 11 REC FM LEVEL +1.8dB		0 APC LOOP BEFORE 1 APC LOOP AFTER	0 NORMAL 1 SQ PB	0 DOC OFF 1 DOC AUTO	0 BURST DEEM 5.0 dB 1 BURST DEEM 5.5dB	0 PHASE ALTERINATOR ON 1 PHASE ALTERINATOR OFF	0 NORMAL PB 1 TRICK PB
0000 1000 GROUP 8 PB	00 NC2 CTL-1 K=MAX 01 NC2 CTL-2 00 NC2 CTL-1 K=MAX 00 NC2 CTL-1 K=MAX		0 THIS BIT IS FIX	0 VIDEO PEAK LOW 1 VIDEO FEAK HIGH	0000 PIC CTL -7dB(SOFT) 0001 PIC CTL -6dB 0010 PIC CTL -5dB 0011 PIC CTL -4dB 0100 PIC CTL -3dB 0101 PIC CTL -2dB 0110 PIC CTL -1dB 0111 PIC CTL -0dB		1000 PIC CTL 0dB 1001 PIC CTL +1dB 1010 PIC CTL +2dB 1011 PIC CTL +3dB 1100 PIC CTL +4dB 1101 PIC CTL +5dB 1110 PIC CTL +6dB 1111 PIC CTL +7dB (SHAPRNESS)	
0000 1001 GROUP 9 AUDIO	0 MULTI SET MODE 1 4.43MHz ONLY SET MODE	0 NORMAL MODE 1 QH OUT MODE	00 SP (AUDIO) 01 LP (AUDIO) 10 EP (AUDIO) 11 PROHIBIT		00 AUDIO INPUT 3 10 AUDIO INPUT 2 01 AUDIO INPUT1 11 PRIHIBIT		00 AUDIO INPUT 3 10 AUDIO INPUT 2 01 AUDIO INPUT1 11 PRIHIBIT	

8-11. SANYO A/V 1CHIP SERIAL DATA (PAL 4H'D/HI-FI)

PAL SP

EE/REC/PB								
GROUP1	0	0	0	1	1	1		
GROUP2	1	1	1	1	1	0	1	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	0	1	1	1	1	0
GROUP2	1	1	1	1	1	0	1	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	0	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

PAL LP

EE/REC/PB								
GROUP1	0	0	1	0	0	0		
GROUP2	1	1	1	1	1	0	1	0
GROUP3	0	1	1	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			0	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	0	0	0	1	0
GROUP2	1	1	1	1	1	0	1	0
GROUP3	0	1	1	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			0	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	1	1	0	0	0	1	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

MESECAM SP

EE/REC/PB								
GROUP1	0	1	0	1	1	1		
GROUP2	1	1	1	1	1	0	0	1
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	1	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	1	0	1	1	1	1	0
GROUP2	1	1	1	1	1	0	0	1
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	1	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

MESECAM LP

EE/REC/PB								
GROUP1	0	1	0	1	0	0		
GROUP2	1	1	1	1	1	0	0	1
GROUP3	0	1	1	0	0	0	0	0
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	1	1	1	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	1	0	0	1	0	0	1	0
GROUP2	1	1	1	1	1	0	0	1
GROUP3	0	1	1	0	0	0	1	1
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	0	1	1	1	0	1	0
GROUP7	0	0	0	0	0	0	1	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

NTSC SP

EE/REC/PB								
GROUP1	0	0	1	1	1	1		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	0	0	0	0	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	1	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	1	1	1	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	0	0	0	0	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

NTSC EP(SLP)

EE/REC/PB								
GROUP1	0	0	1	1	1	0		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	1	0	0	1			0	0
GROUP6	0	1	1	0	0	0	0	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	1	1	0	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	0	1	0	0	0	0	0
GROUP7	0	0	1	0	0	0	0	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

1.The BIT 1, 2 of Group 1 and Group 9 are automatically switched according to mode (REC, PB, EE) switching.
2.The BIT 3, 4 of Group 5 is automatically switched according to input of A/V switching key.
3.The BIT 3, 4 of Group 9 is fixed to “10” in Hi-Fi mode and automatically switched according to input of A/V switching key in mono mode.
4.In case of NAP, the BIT 7 of Group 2, BIT 2,1 and BIT 8,7 are automatically switched to 0, 00, and 10 by the standard PAL Data.
5.The BIT 1 of Group 3 is set to “1” in playback mode. (only in NTSC/PAL mode).

8-12. SANYO A/V 1CHIP SERIAL DATA (PAL 4H'D)

PAL SP

EE/REC/PB								
GROUP1	0	0	0	1	1	1		
GROUP2	1	1	1	1	1	0	1	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	0	1	1	1	1	0
GROUP2	1	1	1	1	1	0	1	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	0	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

PAL LP

EE/REC/PB								
GROUP1	0	0	1	0	0	0		
GROUP2	1	1	1	1	1	0	1	0
GROUP3	0	1	1	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			0	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	0	0	1	1
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	0	0	0	1	0
GROUP2	1	1	1	1	1	0	1	0
GROUP3	0	1	1	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			0	0
GROUP6	1	0	0	0	1	0	1	0
GROUP7	0	1	1	0	0	0	1	1
GROUP8	1	0	0	1	0	0	1	1
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

MESECAM SP

EE/REC/PB								
GROUP1	0	1	0	1	1	1		
GROUP2	1	1	1	1	1	0	0	1
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	1	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	1	0	1	1	1	1	0
GROUP2	1	1	1	1	1	0	0	1
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	1	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

MESECAM LP

EE/REC/PB								
GROUP1	0	1	0	1	0	0		
GROUP2	1	1	1	1	1	0	0	1
GROUP3	0	1	1	0	0	0	0	0
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	1	1	1	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	1	0	0	1	0	0	1	0
GROUP2	1	1	1	1	1	0	0	1
GROUP3	0	1	1	0	0	0	1	1
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	0	1	1	1	0	1	0
GROUP7	0	0	0	0	0	0	1	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

NTSC SP

EE/REC/PB								
GROUP1	0	0	1	1	1	1		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	1	0	0	0	0	0	0	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	1	0	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	1	1	1	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	1	0	0	0	0	0	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

NTSC EP(SLP)

EE/REC/PB								
GROUP1	0	0	1	1	1	0		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	1	0	0	1			0	0
GROUP6	0	1	1	0	0	0	0	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	1	1	0	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	1	0	0	1			0	0
GROUP6	0	0	1	0	0	0	0	0
GROUP7	0	0	1	0	0	0	0	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

1.The BIT 1, 2 of Group 1 and Group 9 are automatically switched according to mode (REC, PB, EE) switching.
2.The BIT 3, 4 of Group 5 is automatically switched according to input of A/V switching key.
3.The BIT 3, 4 of Group 9 is fixed to “10” in Hi-Fi mode and automatically switched according to input of A/V switching key in mono mode.
4.In case of NAP, the BIT 7 of Group 2, BIT 2,1 and BIT 8,7 are automatically switched to 0, 00, and 10 by the standard PAL Data.
5.The BIT 1 of Group 3 is set to “1” in playback mode. (only in NTSC/PAL mode).

8-13. SANYO A/V 1CHIP SERIAL DATA (PAL 2H'D(SP/LP)

PAL SP

EE/REC/PB								
GROUP1	0	0	0	1	1	1		
GROUP2	1	1	1	1	1	1	1	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	1	1	1	0	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	1
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	0	1	1	1	1	0
GROUP2	1	1	1	1	1	1	1	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	1	1	1	0	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	1
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

PAL LP

EE/REC/PB								
GROUP1	0	0	1	0	0	0		
GROUP2	1	1	1	1	1	1	1	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	0	1	0	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	1	0	0	0	1	0
GROUP2	1	1	1	1	1	0	1	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	0
GROUP6	0	0	1	0	1	0	1	0
GROUP7	0	1	1	0	0	0	1	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

MESECAM SP

EE/REC/PB								
GROUP1	0	1	0	1	1	1		
GROUP2	1	1	1	1	1	1	0	1
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	1	1	1	1	1	0	1	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	1
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	1	0	1	1	1	1	0
GROUP2	1	1	1	1	1	1	0	1
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	1	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	1	1	1	1	1	0	1	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

MESECAM LP

EE/REC/PB								
GROUP1	0	1	0	1	0	0		
GROUP2	1	1	1	1	1	1	0	1
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	0	1	1	1	0	1	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	1	0	0	1	0	0	1	0
GROUP2	1	1	1	1	1	1	0	1
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	1	0	0	1	1
GROUP5	0	1	0	1			0	0
GROUP6	0	0	1	1	1	0	1	0
GROUP7	0	0	0	0	0	0	1	1
GROUP8	1	0	0	1	1	0	0	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

NTSC SP

EE/REC/PB								
GROUP1	0	0	0	1	1	1		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	0	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	1	0	0	0	1	0	0	0
GROUP7	0	0	0	0	1	0	0	0
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	0				
	8	7	6	5	4	3	2	1

TRICK PLAY								
GROUP1	0	0	0	1	1	1	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	0	1	0	1			1	1
GROUP6	0	1	0	0	0	0	0	0
GROUP7	0	0	0	0	0	0	0	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	0			1	0
	8	7	6	5	4	3	2	1

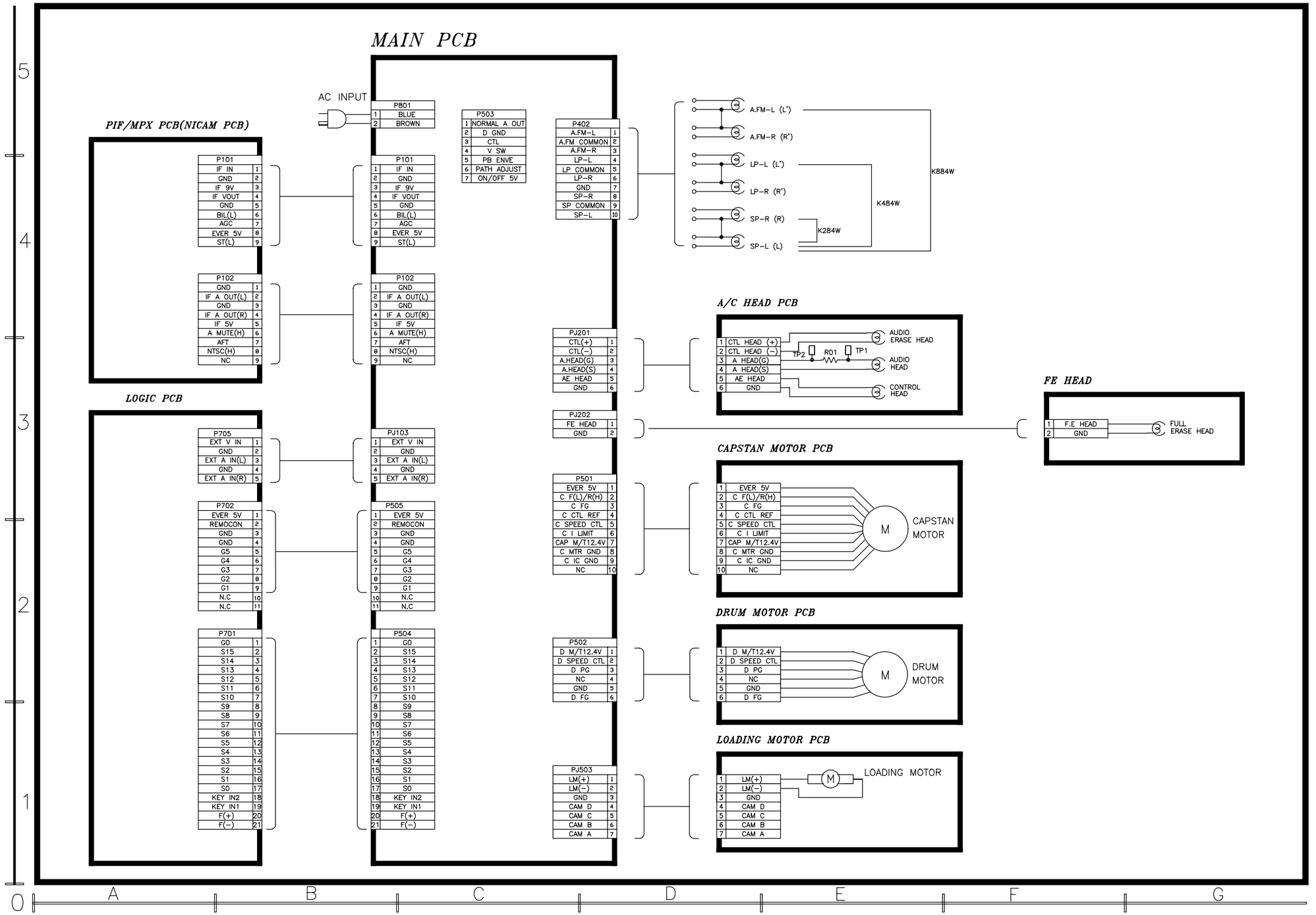
NTSC EP(SLP)

EE/REC/PB								
GROUP1	0	0	0	1	1	0		
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	0
GROUP4	1	0	1	0	0	1	1	1
GROUP5	1	0	0	1			0	1
GROUP6	0	1	1	0	0	0	0	0
GROUP7	0	0	1	0	1	0	0	0
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1				
	8	7	6	5	4	3	2	1

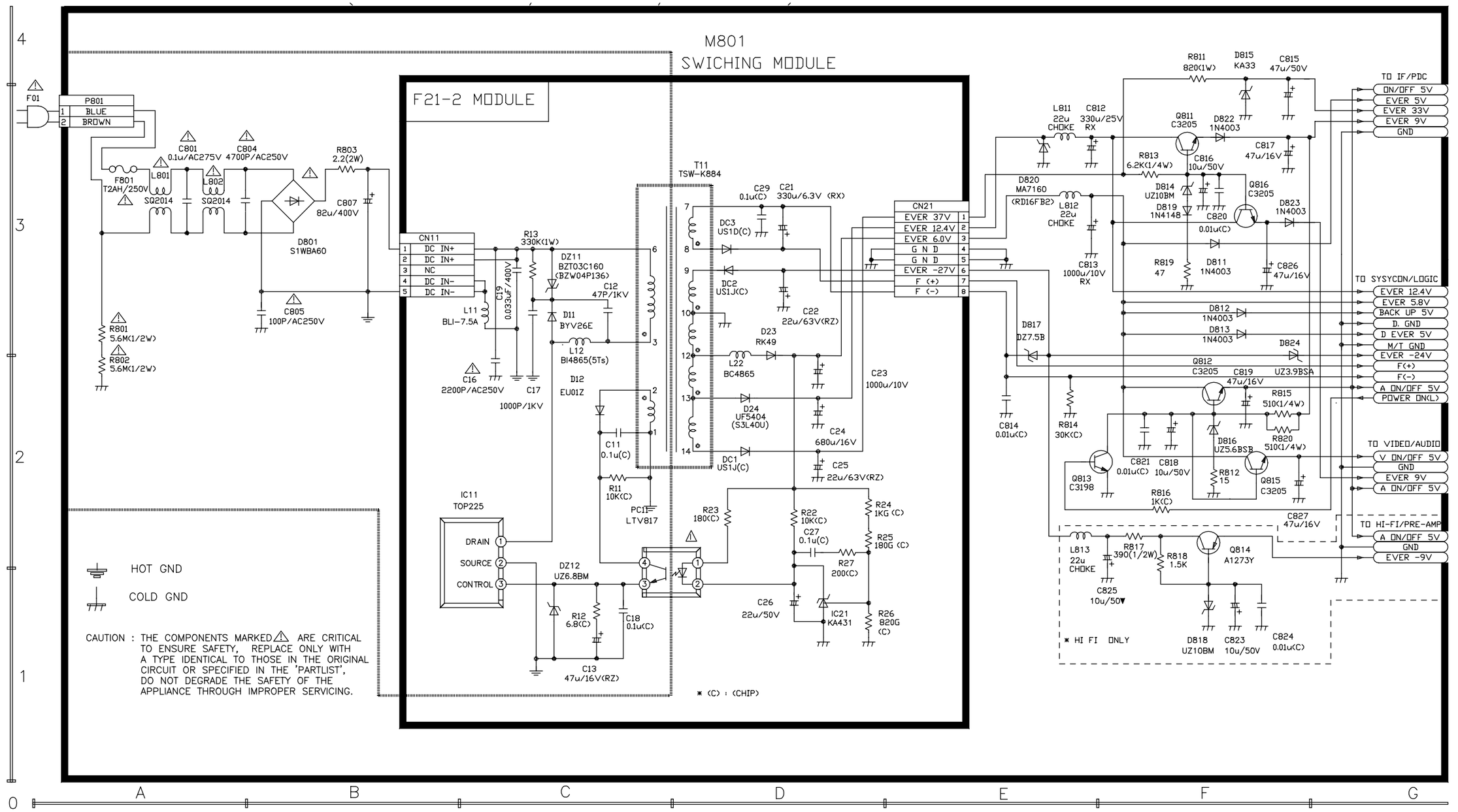
TRICK PLAY								
GROUP1	0	0	0	1	1	0	1	0
GROUP2	0	0	0	0	0	0	0	0
GROUP3	1	0	0	0	0	0	1	1
GROUP4	1	0	1	0	0	1	1	1
GROUP5	1	0	0	1			0	1
GROUP6	0	0	1	0	0	0	0	0
GROUP7	0	0	1	0	0	0	1	1
GROUP8	1	0	0	1	1	0	1	0
GROUP9	0	0	0	1			1	0
	8	7	6	5	4	3	2	1

1.The BIT 1, 2 of Group 1 and Group 9 are automatically switched according to mode (REC, PB, EE) switching.
2.The BIT 3, 4 of Group 5 is automatically switched according to input of A/V switching key.
3.The BIT 3, 4 of Group 9 is fixed to “10” in Hi-Fi mode and automatically switched according to input of A/V switching key in mono mode.
4.In case of NAP, the BIT 7 of Group 2, BIT 2,1 and BIT 8,7 are automatically switched to 0, 00, and 10 by the standard PAL Data.
5.The BIT 1 of Group 3 is set to “1” in playback mode. (only in NTSC/PAL mode).

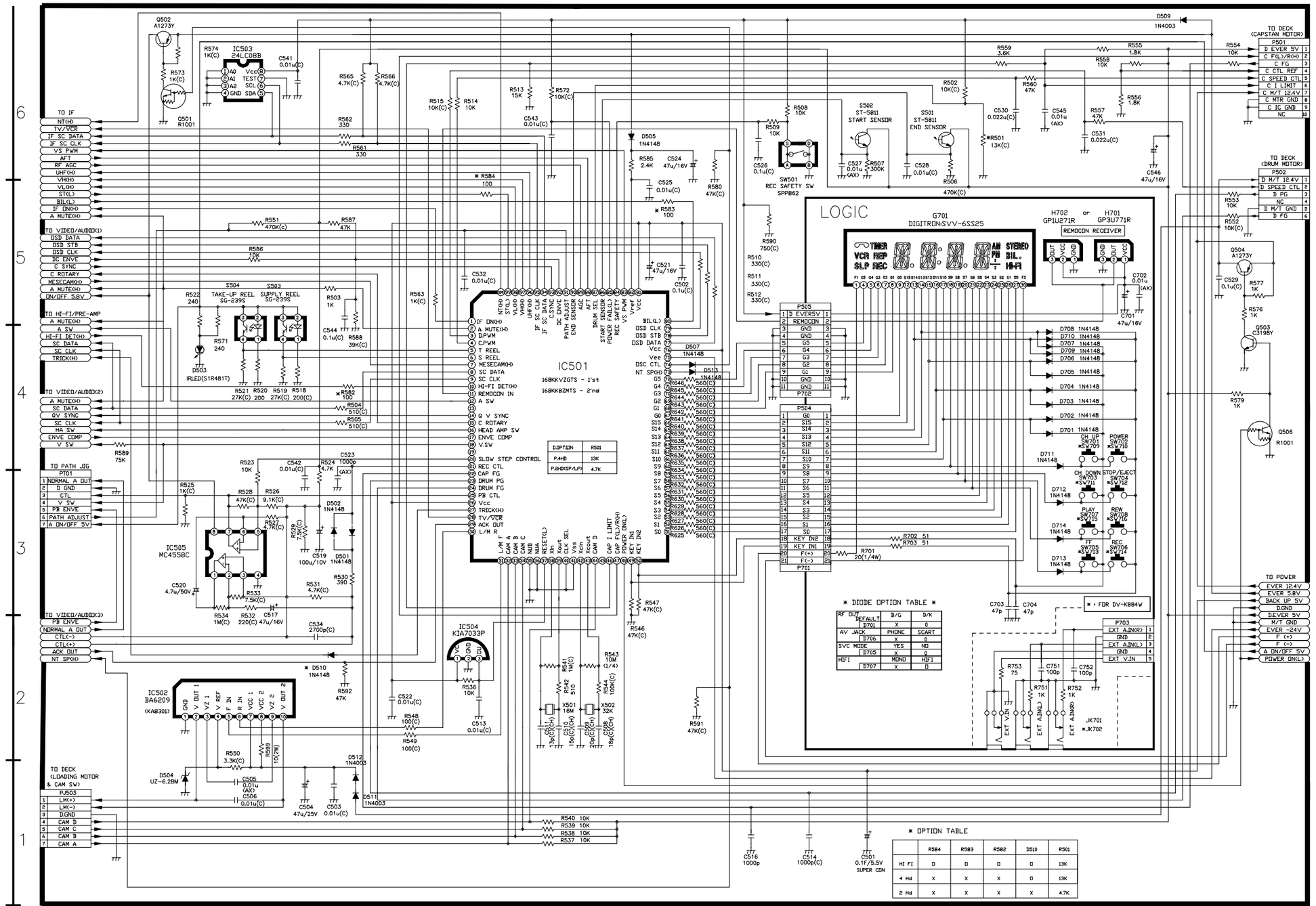
9-1. CONNECTION DIAGRAM (DV-K884W/K484W/K284W)



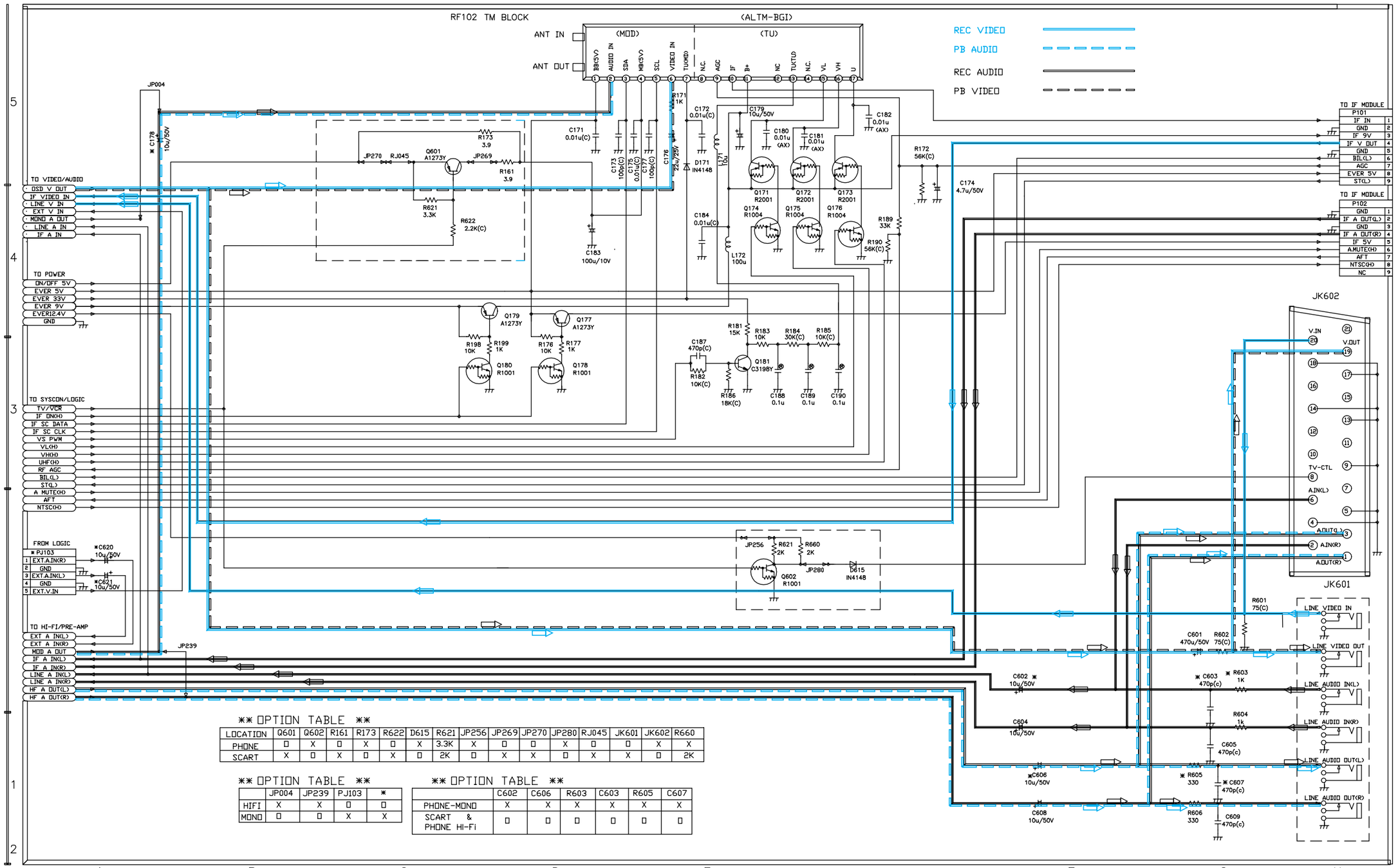
9-2. POWER CIRCUIT DIAGRAM (DV-K884W/K484W/K284W)



9-3. SYSCON AND LOGIC CIRCUIT DIAGRAM



9-4. PIF CIRCUIT DIAGRAM (DV-K884W/K484W/K284W)



** OPTION TABLE **

LOCATION	Q601	Q602	R161	R173	R622	D615	R621	JP256	JP269	JP270	JP280	RJ045	JK601	JK602	R660
PHONE	□	X	□	X	□	X	3.3K	X	□	□	X	□	□	X	X
SCART	X	□	X	□	X	□	2K	□	X	X	□	X	X	□	2K

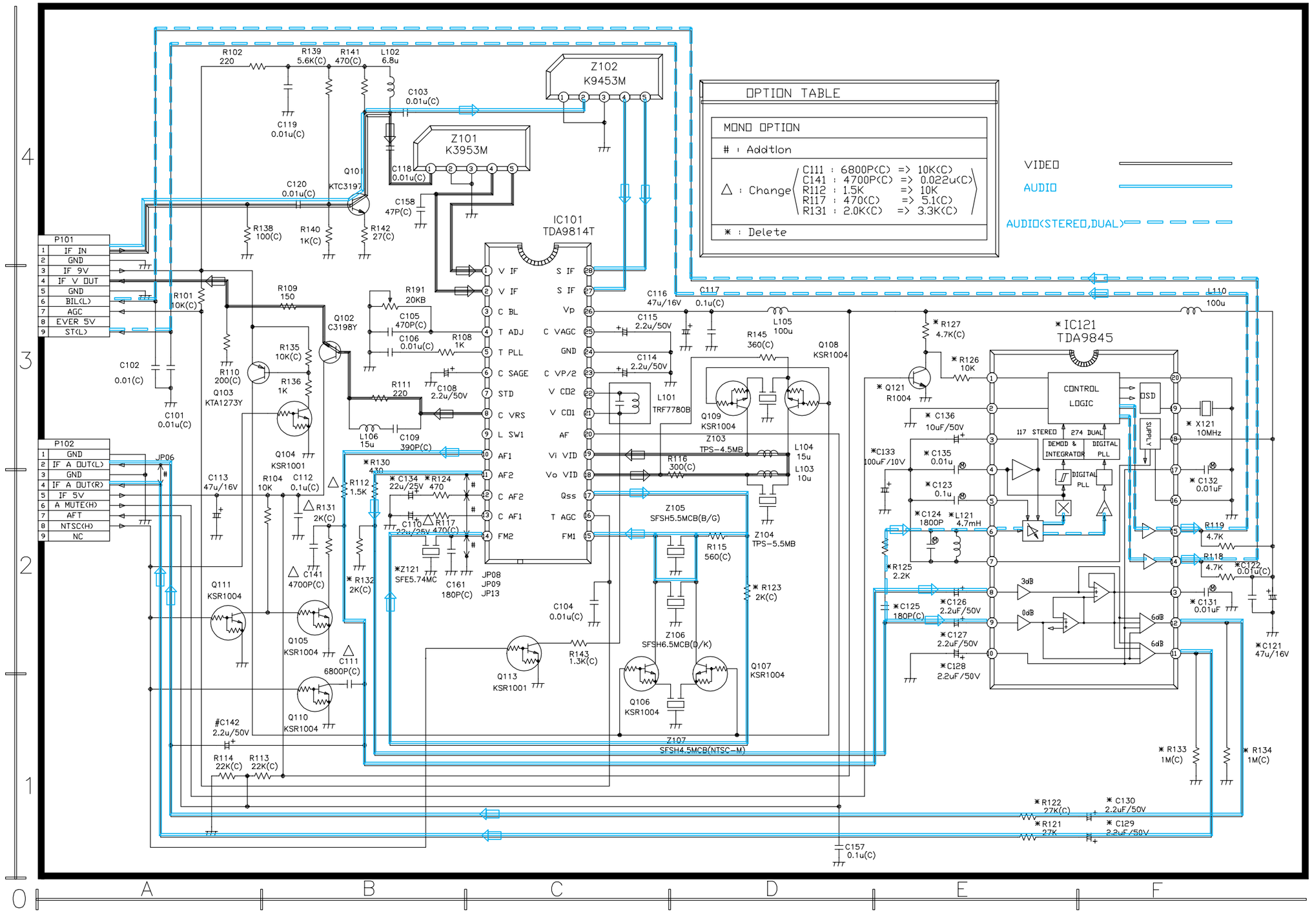
** OPTION TABLE **

	JP004	JP239	PJ103	*
HIFI	X	X	□	□
MONO	□	□	X	X

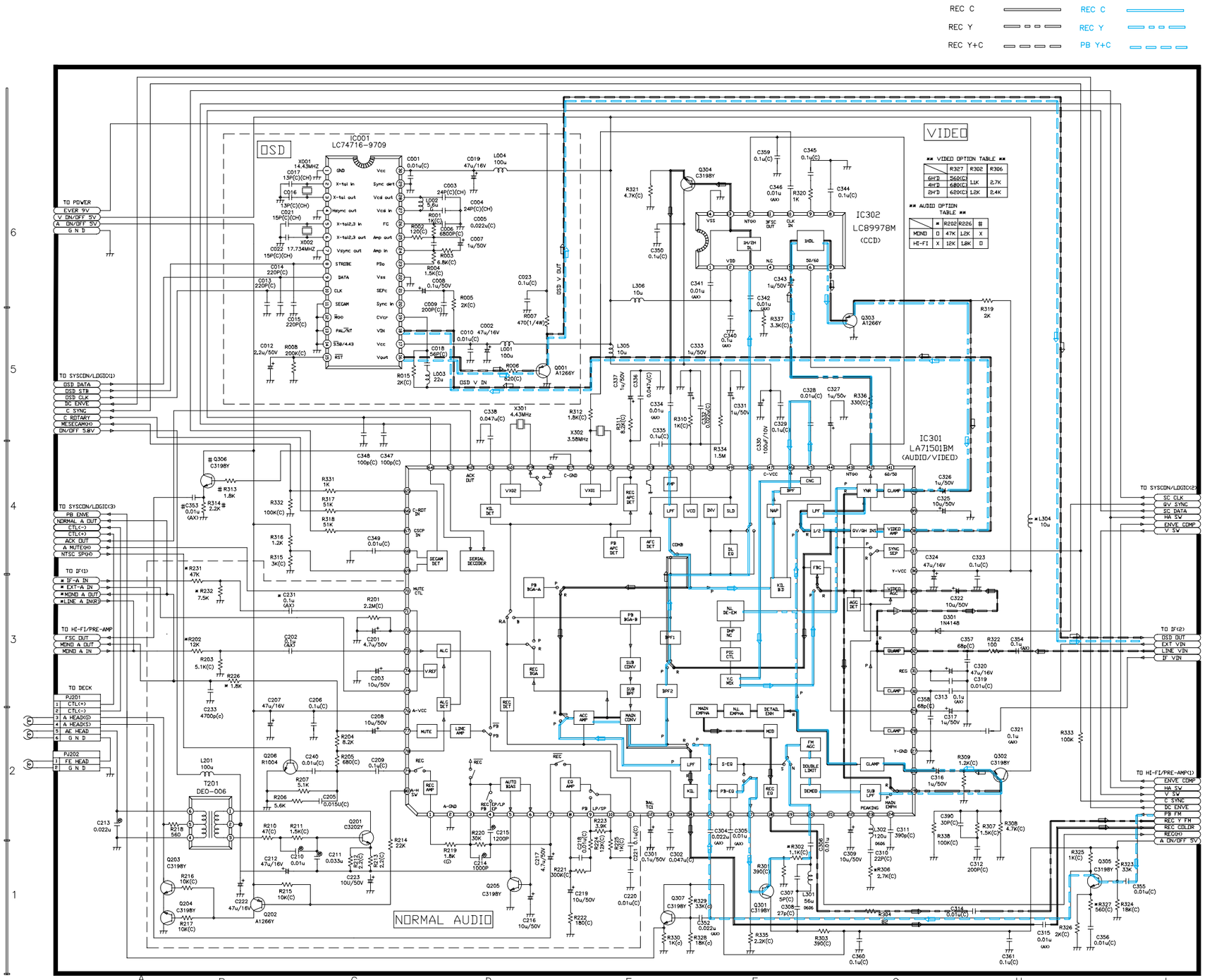
** OPTION TABLE **

	C602	C606	R603	C603	R605	C607
PHONE-MONO	X	X	X	X	X	X
SCART & PHONE HI-Fi	□	□	□	□	□	□

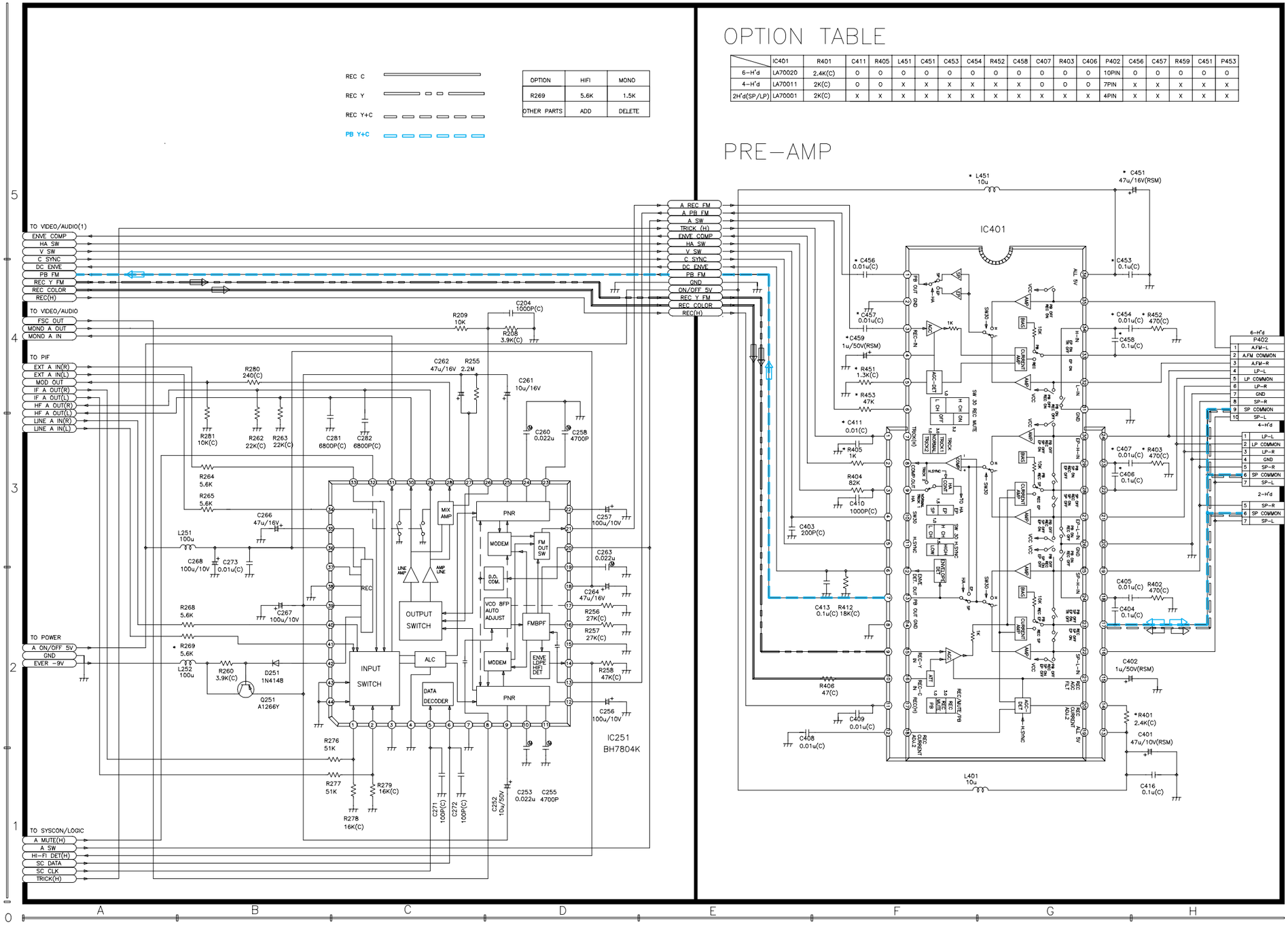
9-5. IF/MPX Module Circuit Diagram (DV-K884W/K484W/K284W)



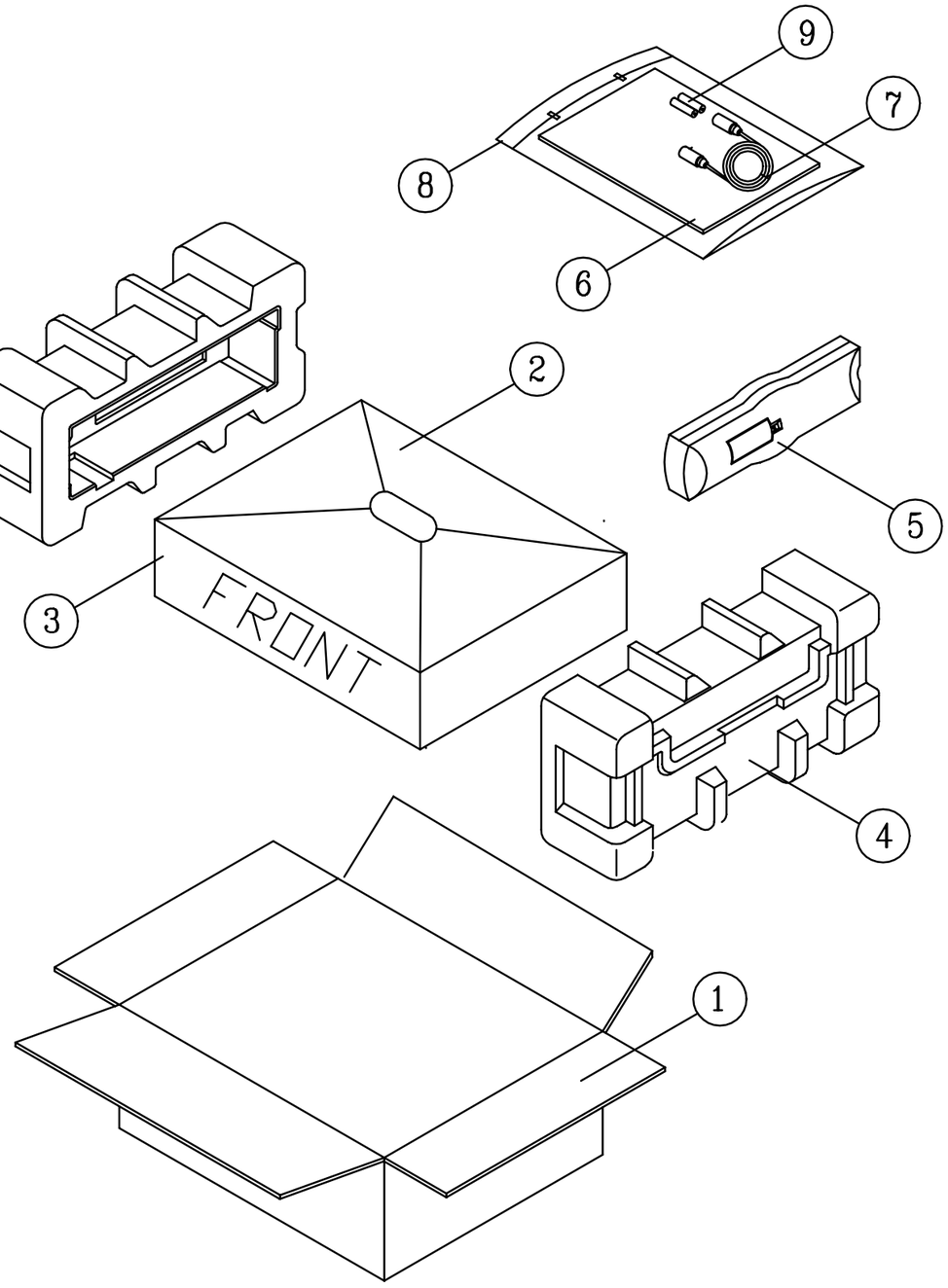
9-6. VIDEO/AUDIO CIRCUIT DIAGRAM (DV-K884W/K484W/K284W)



9-7. Hi-Fi/PRE-AMP CIRCUIT DIAGRAM (DV-K884W/K484W/K284W)



11-1. PACKING ASS'Y

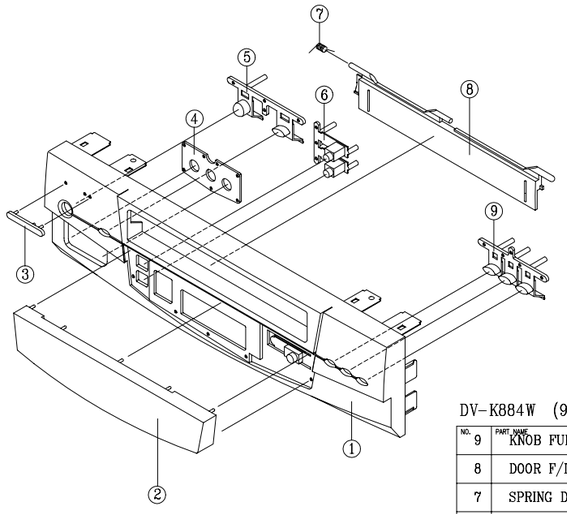


NO.	PART NAME	PART NO.	QUANTITY	MATERIAL	REMARK
9	BATTERY	486A716202	2	AAA 1.5(supergard)	
8	COVER ACCESSORY	97P0424100	1	LD-PE T0.1	
7	CABLE RF	97P880RP10	1	PAL 1.0M	
6	MANUAL OWNERS	97P9560000	1	ALL MODEL	
5	REMOCON HANDSET AS	97P1R2GAC1	1	VR-F2GA	
4	PAD LEFT/RIGHT	97P4923200	1	E.P.S	DV-K* 84W DV-K* 64W : 97P4924600
3	POLY BACK FOR SET	97P4808500	1	PE FOAM	
2	SET TOTAL AS		1	ALL MODELS	
*1	BOX CARTON	97P5043820	1	(SC260+K200)*K200*EX225	

NOTE

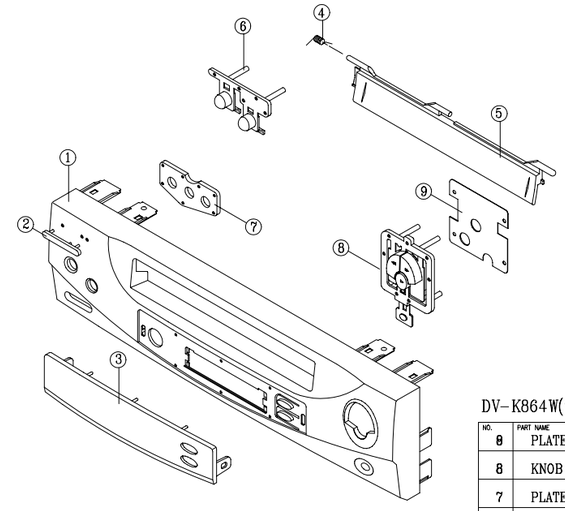
1. GRAPHIC SPEC. OF BOX CARTON
   (1) 97P5043800 : YELLOW BOX
   (2) 97P5043820 : COLOR BOX
   (3) 97P5043830 : GIFT BOX
2. DV-K*84W, DV-K*64W
   (1) * : 8/4/2

11-2. FRONT PANEL ASSEMBLY



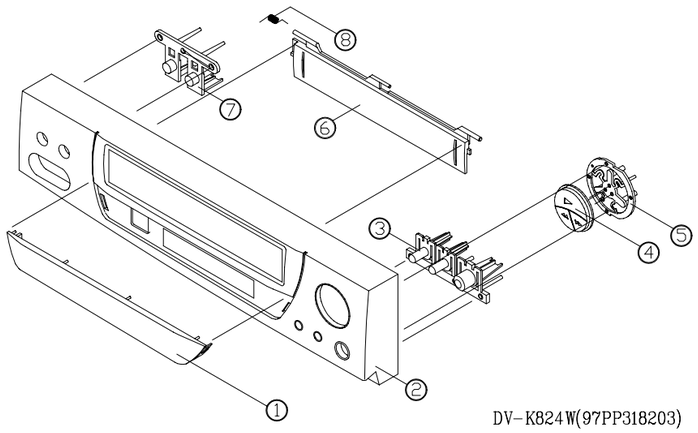
DV-K884W (97PP317201)

NO.	PART NAME	PART NO.	QUANTITY	MATERIAL	REMARK
9	KNOB FUNCTION	97P1353700		ABS	
8	DOOR F/L	97P1819500	1	ABS	
7	SPRING DOOR F/L	97P3033600	1	SWPB 5088N	
6	KNOB CHANNEL	97P1353600	1	ABS	
5	KNOB S/E	97P1353500	1	ABS	
4	PLATE A/V	97P0978100	1	HI-PS	
3	BADGE DAEWOO	97P1502800	1	AL	SILVER
2	WINDOW FRONT	97P1619900	1	PMMA	
1	PANEL FRONT	97P0317201	1	HI-PS(HB)	



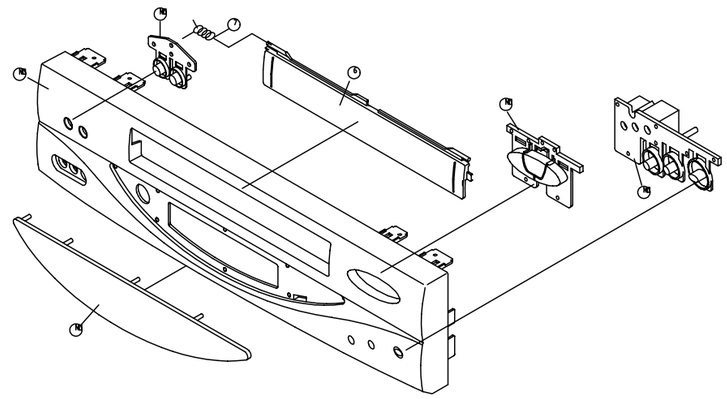
DV-K864W(97PP318001)

NO.	PART NAME	PART NO.	QUANTITY	MATERIAL	REMARK
9	PLATE EARTH A	97P0978200	1	PVC T0.5	
8	KNOB FUNCTION	97P1356200	1	ABS	
7	PLATE AV	97P0978100	1	HI-PS(HB)	
6	KNOB S/E	97P1356000	1	ABS	
5	DOOR F/L	97P1820300	1	ABS	
4	SPRING DOOR F/L	97P3033600	1	SWPB 5088N	
3	WINDOW FRONT	97P1621200	1	PMMA	
2	BADGE DAEWOO	97P1508500	1	AL	SILVER
1	PANEL FRONT	97P0318001	1	HI-PS(HB)	



DV-K824W(97PP318203)

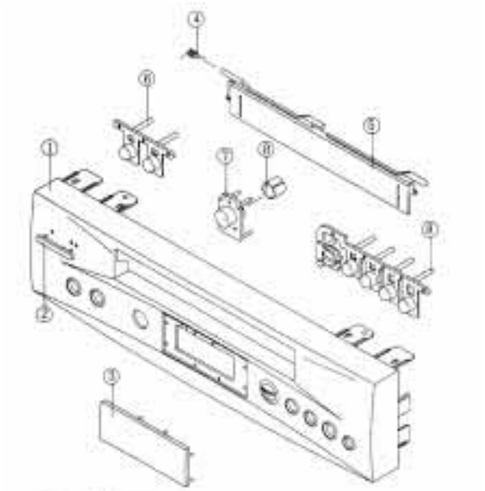
NO.	PART NAME	PART NO.	QUANTITY	MATERIAL	REMARK
8	SPRING F/L DOOR	97P3038000	1	SWPB 5088	
7	KNOB S/EJECT	97P1356600	1	ABS780(95107)	
6	DOOR F/L	97P1820500	1	ABS780	
5	HOLDER KNOB	97P2341600	1	ABS780(95107)	
4	KNOB FUNCTION	97P1356800	1	ABS780(95107)	
3	KNOB CH/REC	97P1356700	1	ABS780(95107)	
2	PANEL FRONT	97P0318201	1	HI-PS(HB)	CHANGE CORE : 4A
1	WINDOW FRONT	97P1621400	1	PMMA(41791)	



DV-K8K4W(97PP318100)

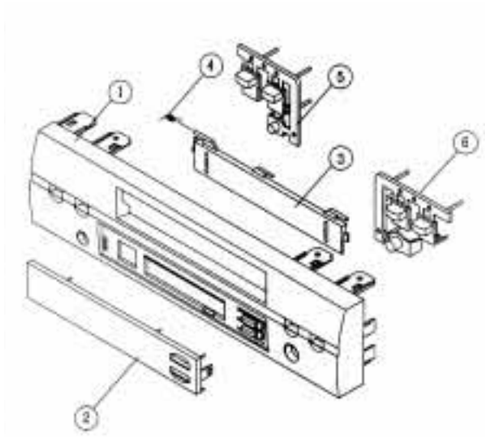
NO.	LOCATION NO.	PART NAME	PART NO.	QUANTITY	MATERIAL	REMARK
7	B008	SPRING F/L DOOR	97P3040000	1	SWPB	
6	B007	DOOR F/L	97P1820000	1	ABS	
5	B005	KNOB FUNCTION	97P1355100	1	ABS	
4	B004	KNOB CH/REC	97P1355300	1	ABS	
3	B003	KNOB P/EJECT	97P1355200	1	ABS	
2	B002	WINDOW FRONT	97P1620600	1	PMMA	
1	B001	PANEL FRONT	97P0318100	1	HI-PS(HB)	

¡ **NOTE:**
: 4 / 2



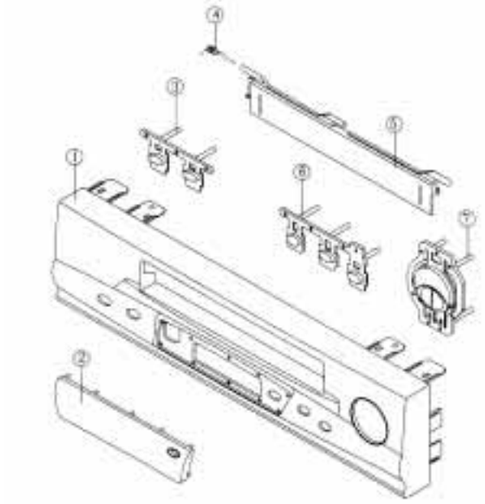
DV-K#44W(97PD179300)

8	KNOB FUNCTION		1	
7	DOOR F/L		1	
6	SPRING DOOR F/L		1	
5	KNOB CHANNEL		1	
4	KNOB S/E		1	
3	HANDLE DAEWOO		1	
2	WINDOW FRONT		1	
1	PANEL FRONT		1	



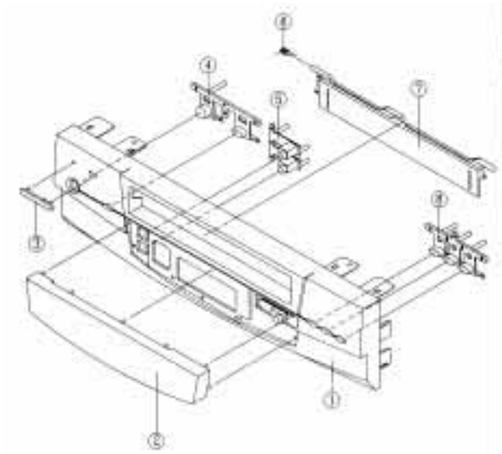
DV-K#04W(97PD185800)

6	KNOB-B		1	ABS
5	KNOB-A		1	ABS
4	SPRING F/L DOOR		1	
3	DOOR F/L		1	ABS
2	WINDOW FRONT		1	
1	PANEL FRONT		1	



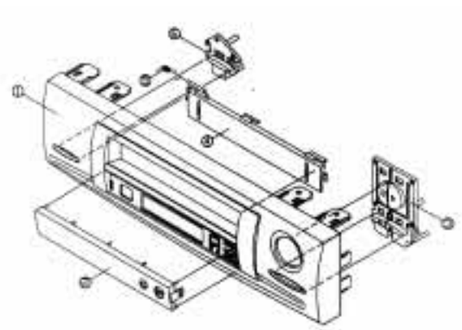
DV-K#B4W(97PD189100)

7	KNOB FUNCTION		1	
6	KNOB CH/REC		1	
5	DOOR F/L		1	
4	SPRING DOOR F/L		1	
3	KNOB S/E		1	
2	WINDOW FRONT		1	
1	PANEL FRONT		1	



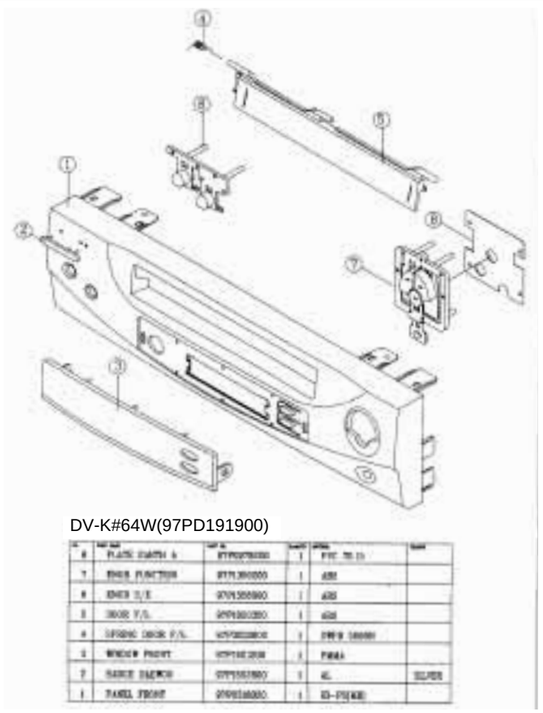
DV-K#84W(97PD190100)

8	KNOB FUNCTION		1	
7	DOOR F/L		1	
6	SPRING DOOR F/L		1	
5	KNOB CHANNEL		1	
4	KNOB S/E		1	
3	HANDLE DAEWOO		1	
2	WINDOW FRONT		1	
1	PANEL FRONT		1	



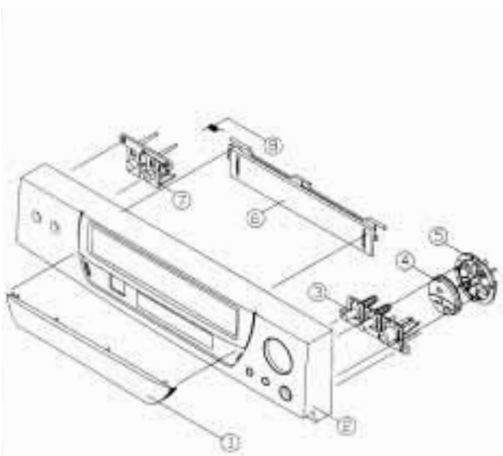
DV-K#A4W(97PD189000)

6	KNOB S/E		1	ABS
5	SPRING F/L DOOR		1	
4	DOOR F/L		1	ABS
3	KNOB FUNCTION		1	ABS
2	WINDOW FRONT		1	
1	PANEL FRONT		1	



DV-K#64W(97PD191900)

8	PLATE SWITCH A		1	
7	KNOB FUNCTION		1	
6	KNOB S/E		1	
5	DOOR F/L		1	
4	SPRING DOOR F/L		1	
3	WINDOW FRONT		1	
2	HANDLE DAEWOO		1	
1	PANEL FRONT		1	



DV-K#24W(97PD192700)

8	SPRING F/L DOOR		1	
7	KNOB S/EJECT		1	
6	DOOR F/L		1	
5	HOLDER KNOB		1	
4	KNOB FUNCTION		1	
3	KNOB CH/REC		1	
2	PANEL FRONT		1	
1	WINDOW FRONT		1	

11-3. INSTRUMENT DISASSEMBLY

1. TOP COVER REMOVAL (FIG. 1)

1) Remove five (5) screws holding the top cover.
2) Carefully lift the back of the top cover and slide to the rear to remove.

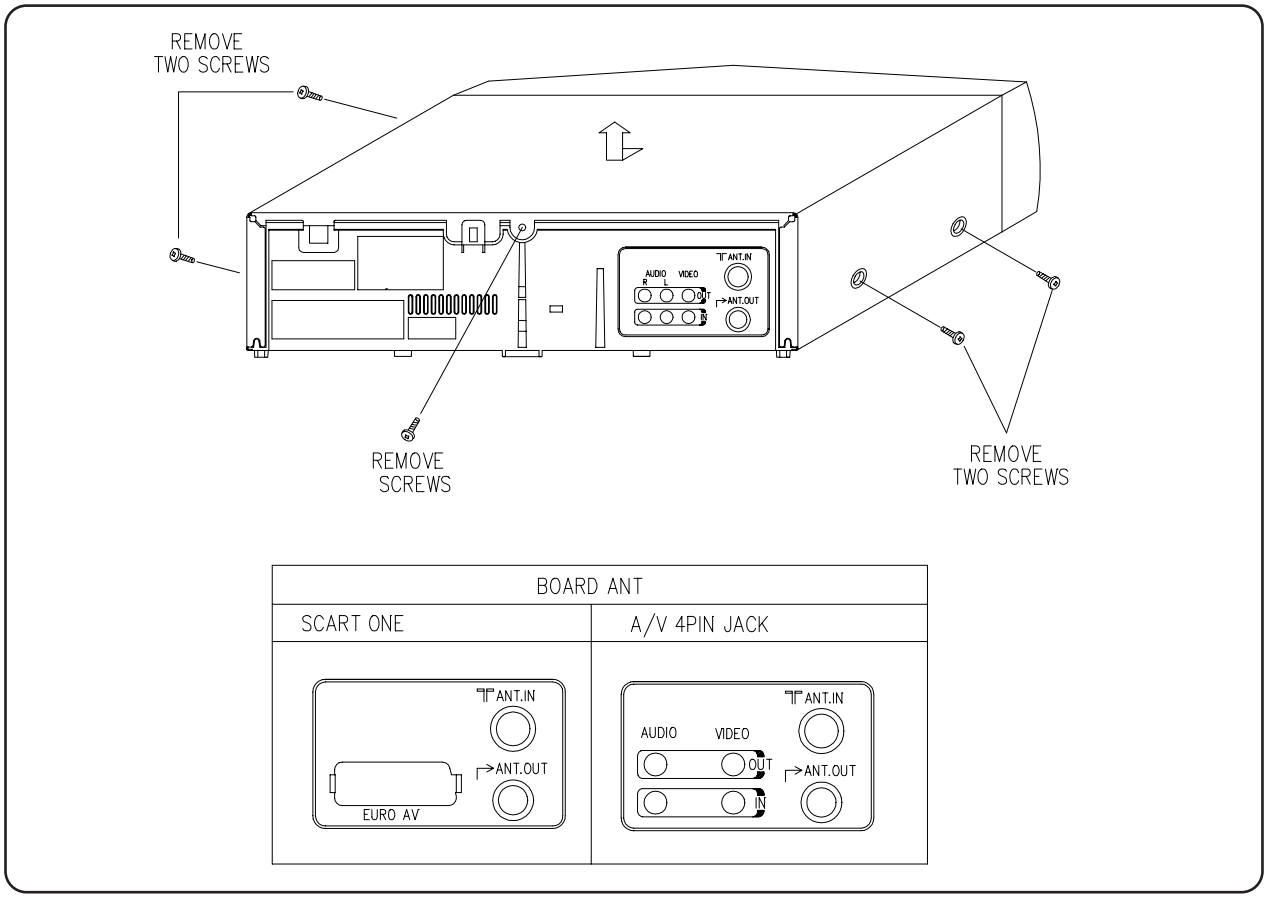
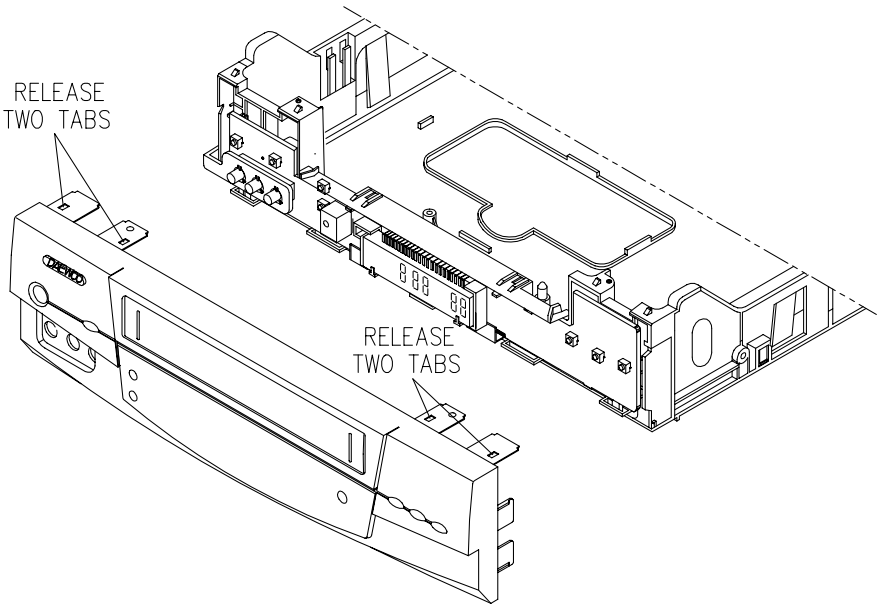


FIG. 1

2. FRONT PANEL REMOVAL (FIG. 2-1)

1) Remove the top cover.
2) Release seven (7) tabs holding the front panel.
3) Remove front panel.



DV-K884W

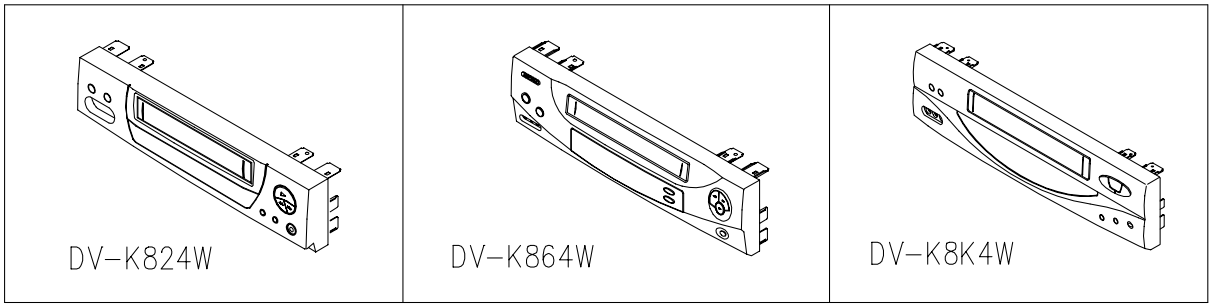


FIG. 2-1

FRONT PANEL REMOVAL (FIG. 2-2)

1) Remove the top cover.
2) Remove two (2) screws securing front panel.
3) Remove the F/L bracket.
4) Release seven (7) tabs holding the front panel.
5) Remove the front panel.

¡ **NOTE:**
: 4 / 2

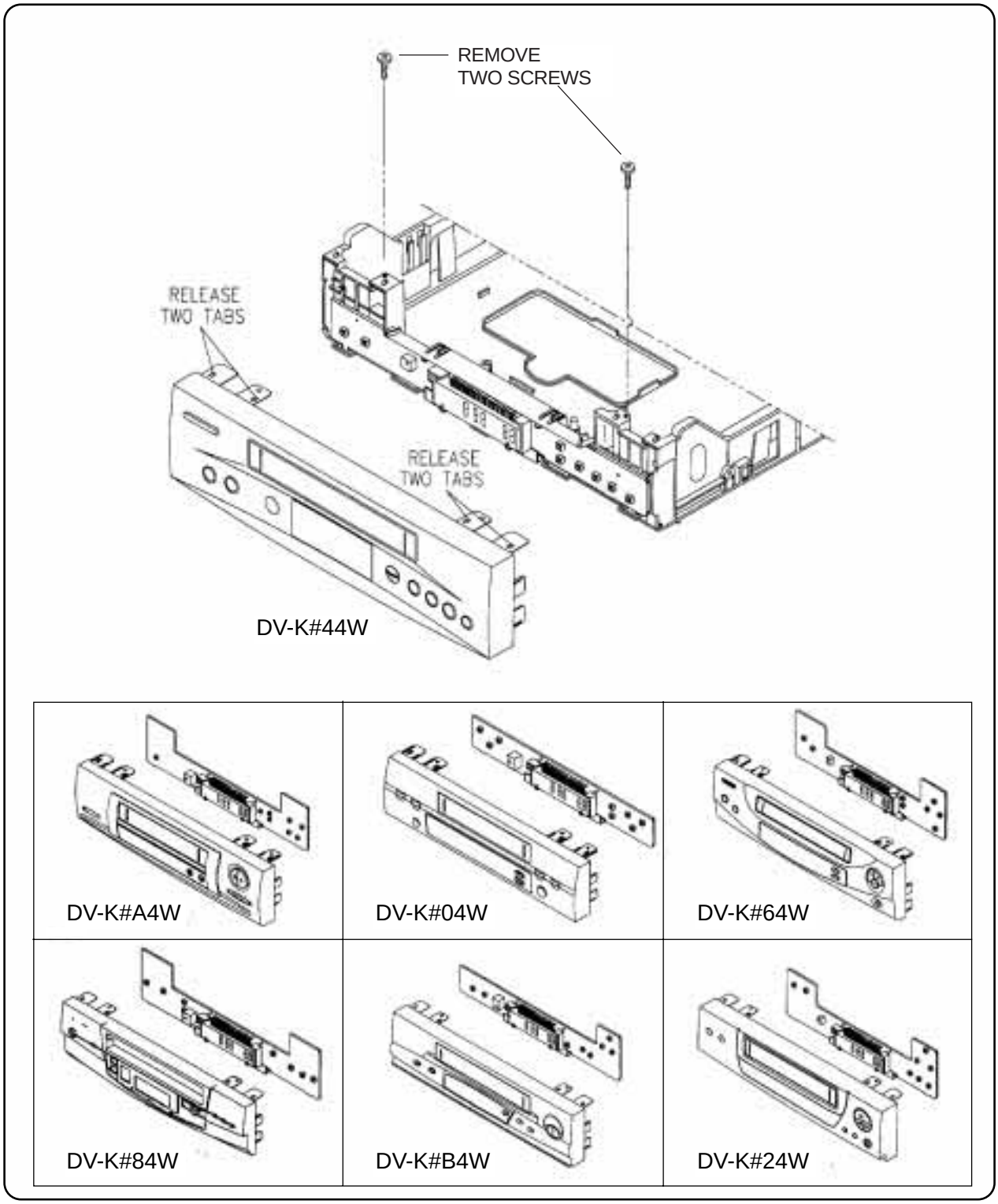


FIG. 2-2

3. BOTTOM COVER REMOVAL (FIG. 3)
1) Remove the top cover and front panel.
2) Remove three (3) screws.
3) Release four (4) tabs and lift out the bottom cover.

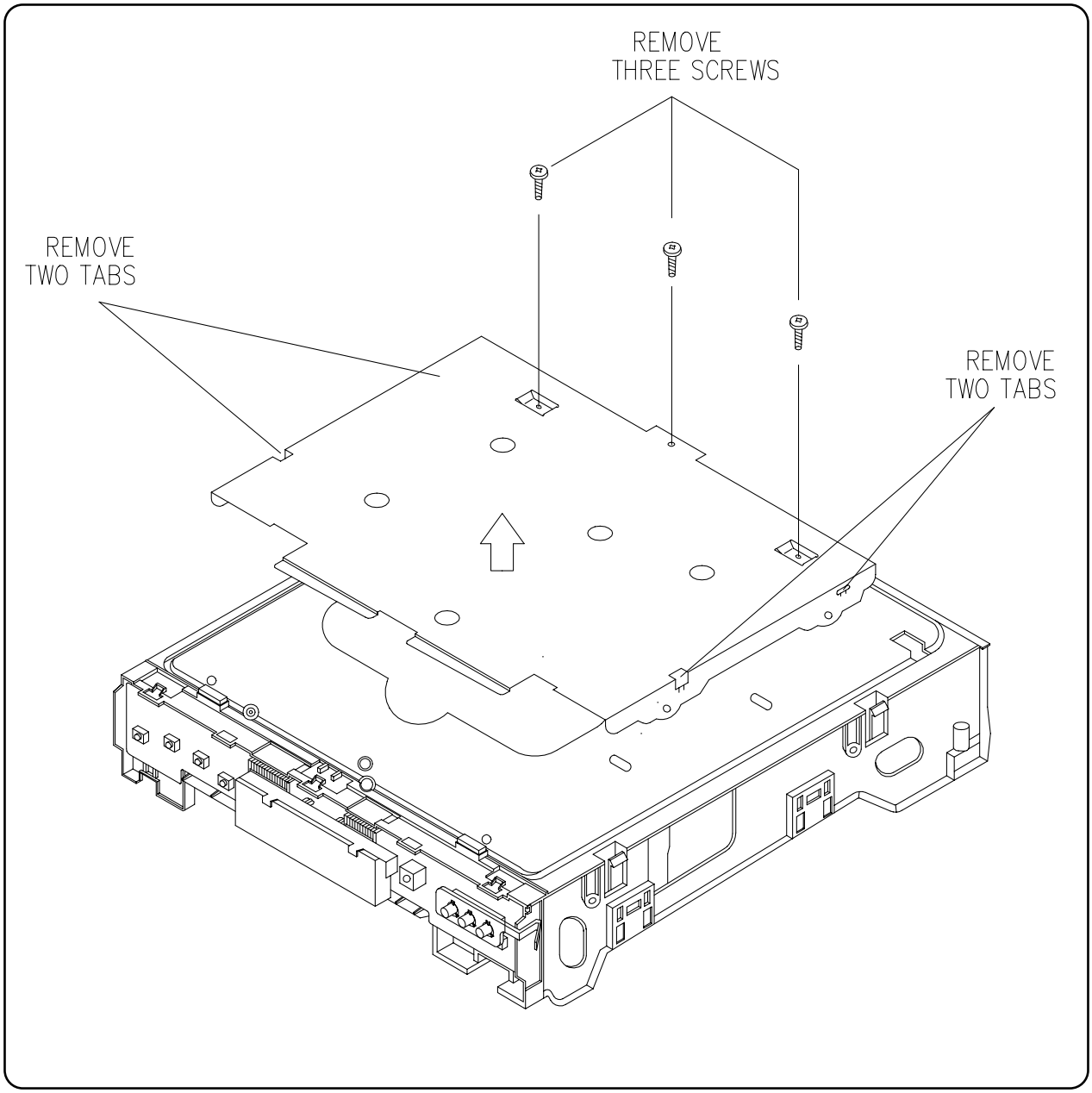


FIG. 3

4. F/L DOOR REMOVAL (FIG. 4)
1) Open the F/L DOOR 90°.
2) Remove the F/L DOOR in the direction of arrow.

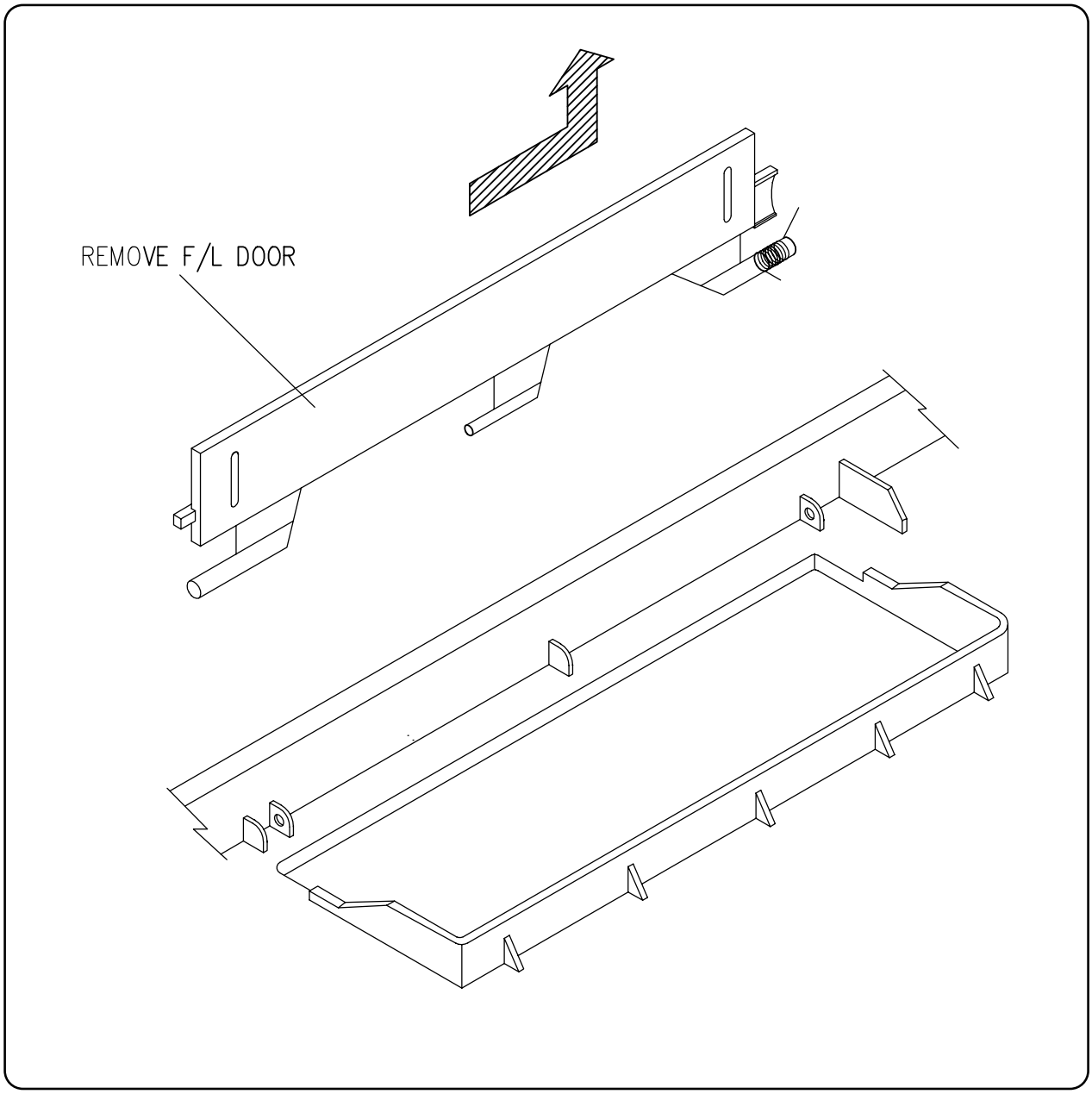
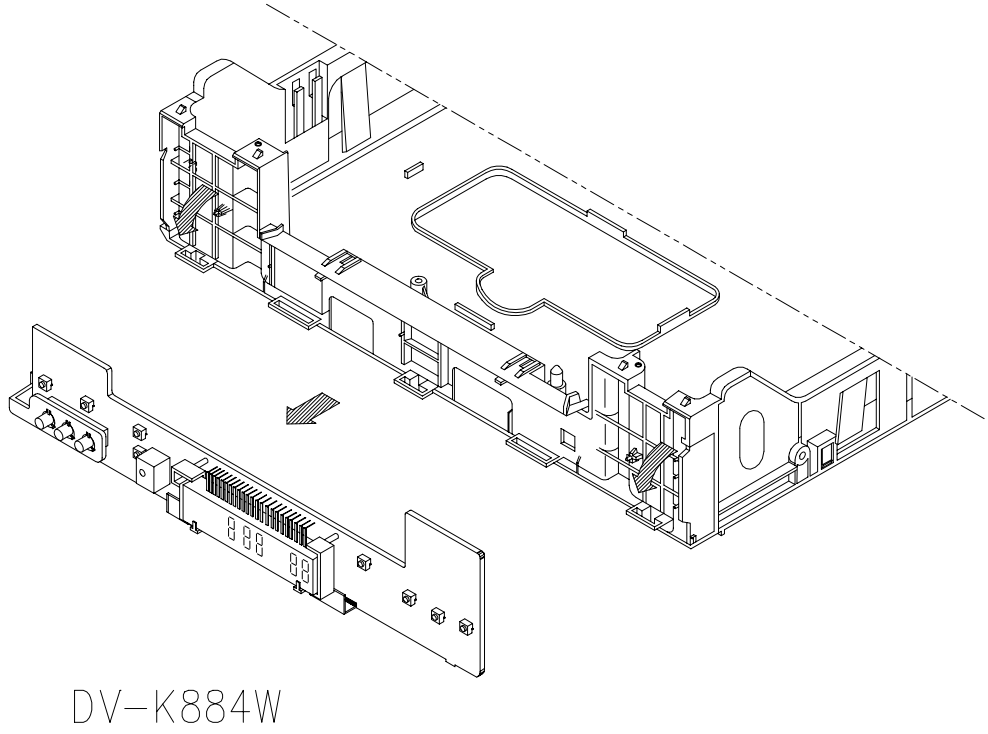


FIG. 4

5. PCB LOGIC ASS'Y REMOVAL (FIG. 5-1)
1) Release two (2) tabs holding the PCB LOGIC AS.
2) Tilt PCB LOGIC AS forward to remove in the direction of arrow.



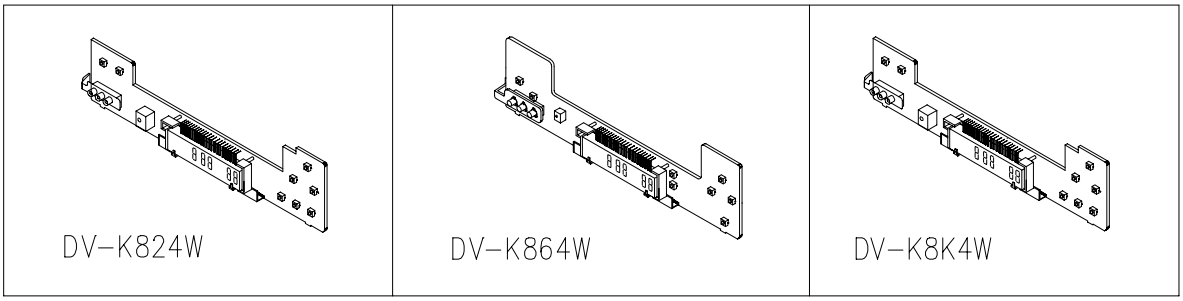
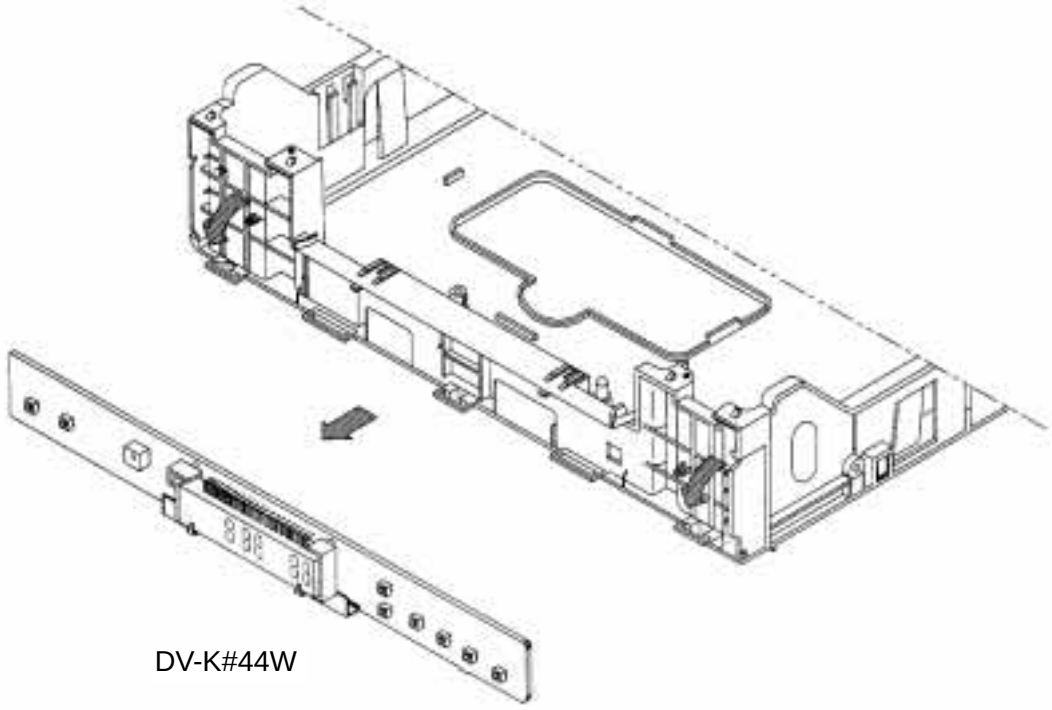


FIG. 5-1

PCB LOGIC ASS'Y REMOVAL (FIG. 5-2)

1) Release two (2) tabs holding the PCB LOGIC AS.
2) Tilt PCB LOGIC AS forward to remove in the direction of arrow.

¡ **NOTE:**
: 4 / 2



DV-K#44W

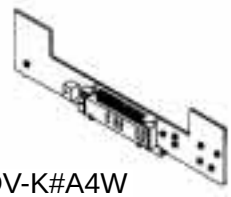
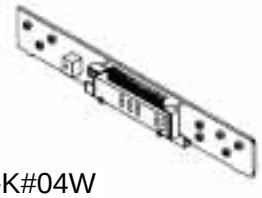
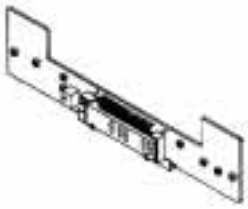
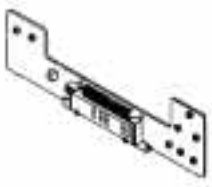
 DV-K#A4W	 DV-K#04W	DV-K#64W
 DV-K#84W	DV-K#B4W	 DV-K#24W

FIG. 5-2

6. PCB MAIN AS/DECK AS REMOVAL (FIG. 6)

1) Remove five (5) screws.
2) Disconnect the CONNECTOR and FPC.
3) Pull out the DECK AS and COVER PRE-AMP in the direction of arrow.

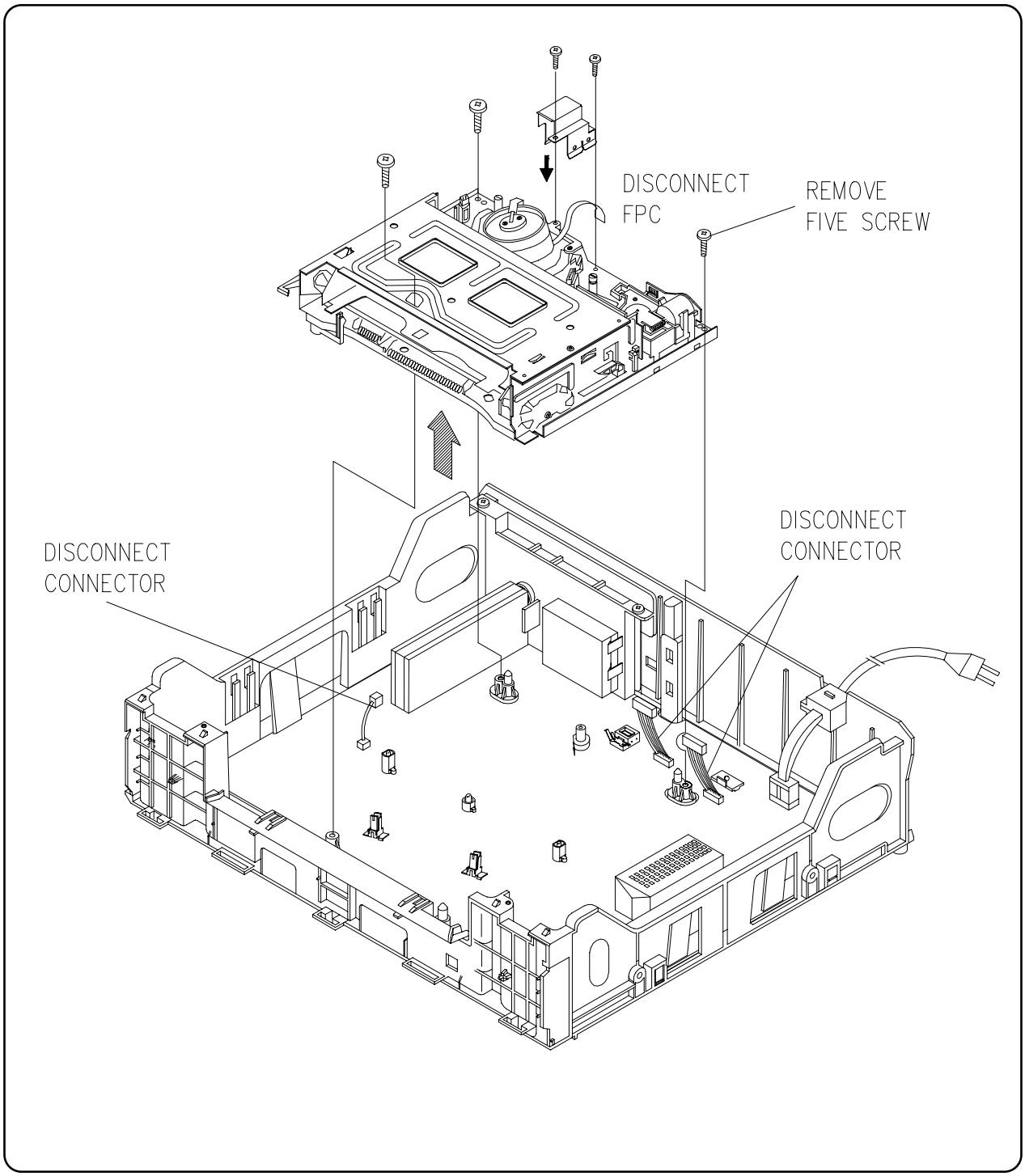


FIG. 6

7. PCB MAIN AS REMOVAL (FIG. 7)

1) Remove two (2) screws.
2) Release three (3) tabs and lift out the PCB MAIN in the direction of the arrow.

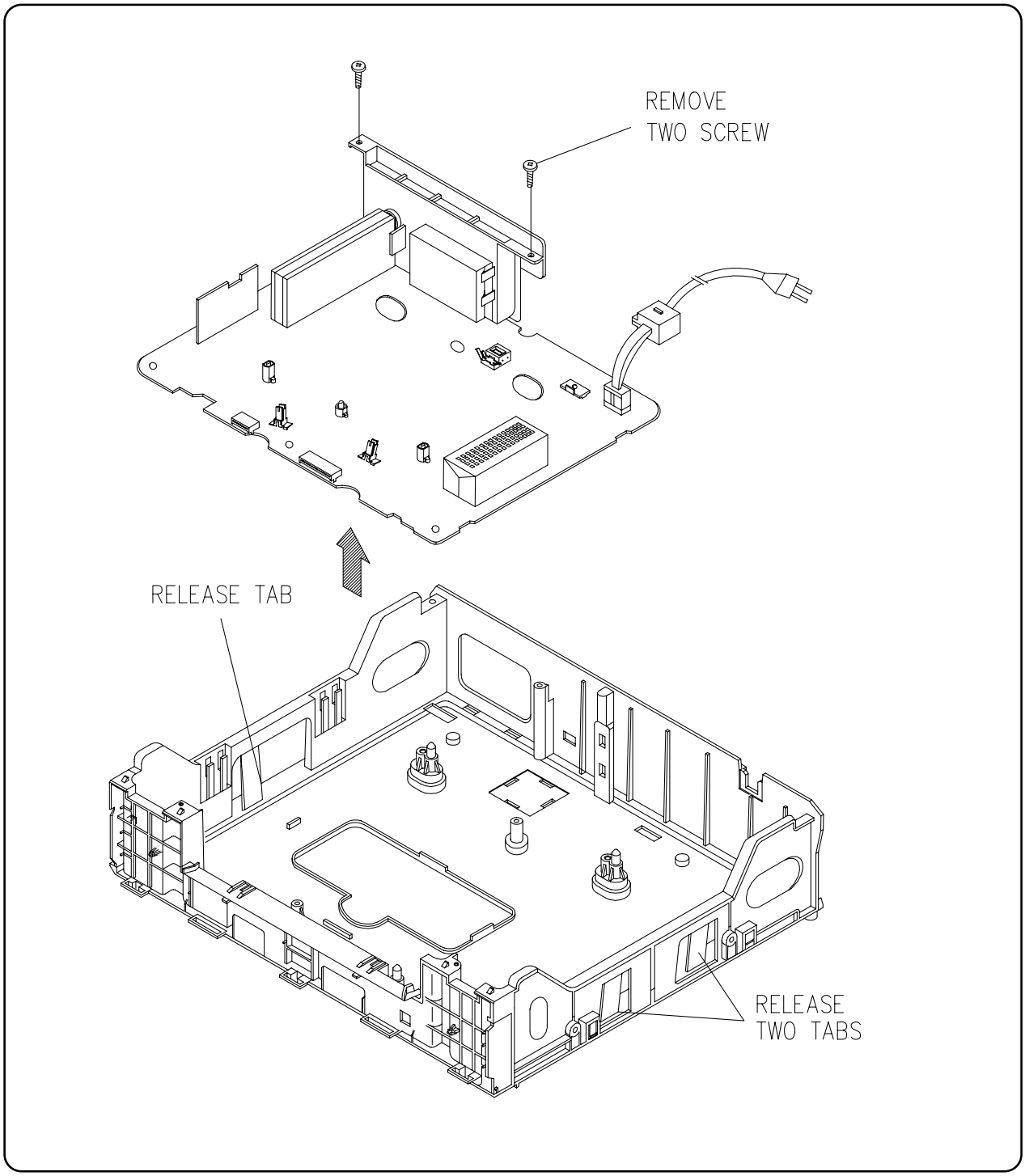


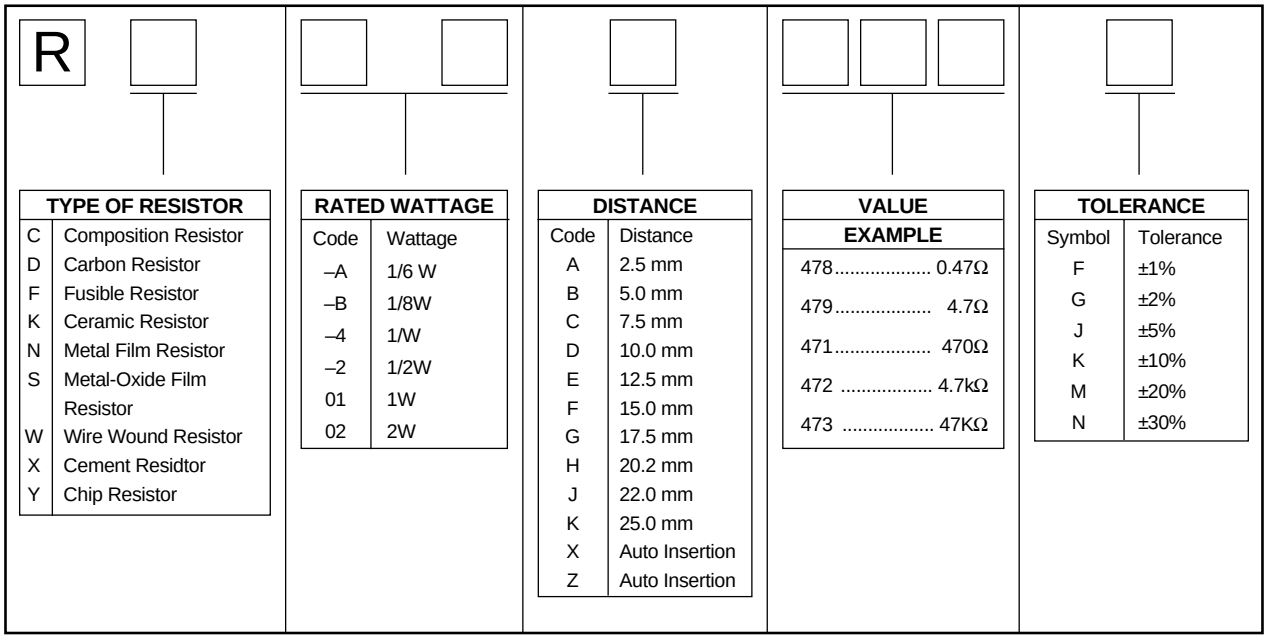
FIG. 7

SECTION 12. ELECTRICAL PARTS LIST

12-1. STANDARD PARTS NUMBER CODING

RESISTOR CODING

1. FIXED RESISTOR CODING



TYPE OF RESISTOR	
C	Composition Resistor
D	Carbon Resistor
F	Fusible Resistor
K	Ceramic Resistor
N	Metal Film Resistor
S	Metal-Oxide Film Resistor
W	Wire Wound Resistor
X	Cement Residtor
Y	Chip Resistor

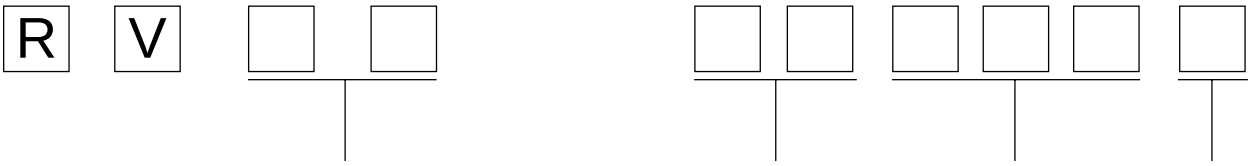
RATED WATTAGE	
Code	Wattage
–A	1/6 W
–B	1/8W
–4	1/W
–2	1/2W
01	1W
02	2W

DISTANCE	
Code	Distance
A	2.5 mm
B	5.0 mm
C	7.5 mm
D	10.0 mm
E	12.5 mm
F	15.0 mm
G	17.5 mm
H	20.2 mm
J	22.0 mm
K	25.0 mm
X	Auto Insertion
Z	Auto Insertion

VALUE
EXAMPLE
478..... 0.47Ω
479..... 4.7Ω
471..... 470Ω
472 ..... 4.7kΩ
473 ..... 47KΩ

TOLERANCE	
Symbol	Tolerance
F	±1%
G	±2%
J	±5%
K	±10%
M	±20%
N	±30%

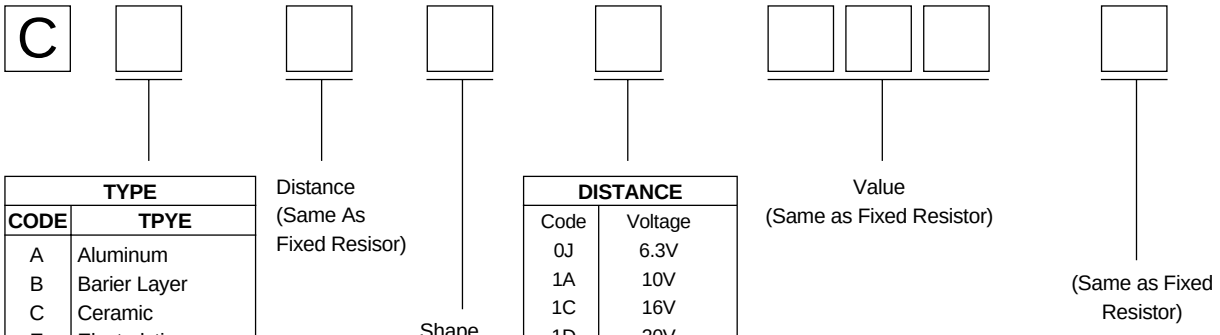
2. SEMI-FIXED RESISTOR CONDING



METERIAL		SHAPE	KNOB	CODE	
CARBON FILM	1	VERTICAL	WITH	1	11
			WITHOUT	2	12
		HORIZONTAL	WITH	3	13
			WITHOUT	4	14
METAL GRAZE	5	VERTICAL	WITH	1	21
			WITHOUT	2	22
		HORIZONTAL	WITH	3	23
			WITHOUT	4	24
CARBON SOLID	5	VERTICAL	WITH	1	51
			WITHOUT	2	52
		HORIZONTAL	WITH	3	53
			WITHOUT	4	54
CERMIET	6	VERTICAL	WITH	1	61
			WITHOUT	2	62
		HORIZONTAL	WITH	3	63
			WITHOUT	4	64

CAPACITOR CODING

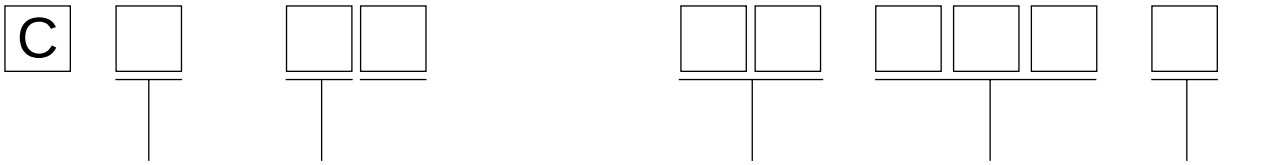
1. NORMAL



TYPE	
CODE	TPYE
A	Aluminum
B	Barier Layer
C	Ceramic
E	Electrolytic
L	Line Across
M	Mylar
S	Styrol
N	Metalized Polyester
Q	Mica
	Oil
T	Tantal

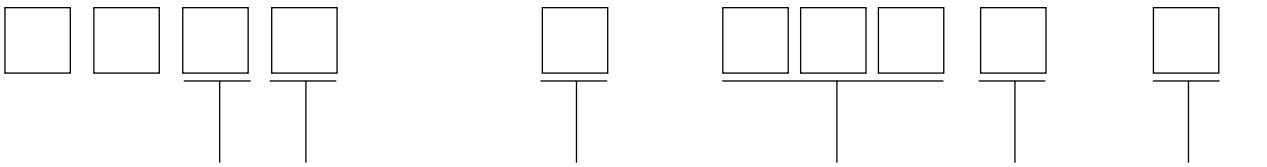
DISTANCE	
Code	Voltage
0J	6.3V
1A	10V
1C	16V
1D	20V
1E	25V
1V	35V
1G	40V
1H	50V
1J	63J
2A	100V
2B	125V
2C	160V
2D	200V
2E	250V

2. TEMPERATURE COMPENSATION



CHARACTERISIC			
CAPACITANCE COEFFICIENT (PPM/°C)		TEMPERATURE COEFFICIENT (PPM/°C)	
A	+100	F	¡ 15
B	+30	G	¡ 30
C	0	H	¡ 60
H	-30	J	¡ 120
L	-80	K	¡ 250
P	-150	L	¡ 500
R	-220	M	¡ 1000
S	-330	N	¡ 2500
T	-470		
U	-750		
V	-1000		
SI	+350~ -1000		

FUSE CODING



DISTANCE	
F	Fiber
G	Glass Tube
L	lead Type
	Glass Tube
T	Temperature
W	Wire
C	Ceramic
P	Plastic

SIZE		
A	MF41	4.6x16
B	MF51	5.2x20
C	MF60	6.3x30
D	MF61	6.3x31.8
E	MF01	10.3x38.1
F	MF04	14.3x50.8
G	MF05	20.5x76.2

VOLTAGE	
1	AC125V
2	AC250V
3	125/250V

DV-K884W

LOC	PART-CODE	PART-NAME	PART-DESC
01	PVACPSD395	ACCESSORY AS	DV-F882DY-CK
D001	97P9560000	MANUAL OWNERS	ALL MODEL
D002	97P880RP10	CABLE RF	PAL 1.0M
D003	97P0424100	COVER ACCESSORY	LD-PE T0.1
D004	486A716202	BATTERY	AAA 1.5V(SUPERGARD)
D005	4858510200	WARRANTY CARD	ART PAPER 120GR 265X190
02	PVPKCPW054	PACKING AS	K884WZ-RG/D(D466-C)
C001	97P4924600	PAD LEFT/RIGHT	EPS
C002	97P4808500	POLY BAG FOR SET	800*800*T0.5
C003	97P5043820	BOX CARTON	(SC260+K200)*K200*EX225
C004	47P4502200	LABEL SERIAL A	ART PAPER STICKER
C005	6520010020	STAPPLE	M20
03	PVMCASW054	CHASSIS MAIN AS	K884WZ-RG/D(97PC0173C-)
A001	97P0610100	CHASSIS MAIN	HI-PS(HB)
A0011	97P0800600	LEG	SBR 80 BLK
A002	97P9340000	LABEL SPEC	PE FILM (ALL MODEL)
A003	7173401211	SCREW TAPPTITE	TT2 BIN 4X12 MFZN
A014	97P4217600	CUSHION T/PLATE	EVA T1.2 BLACK
A015	97P0467400	COVER PREAMP	ET T0.4
A0151	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN
A030	VT0C3-2322	LABEL CD	W/ADH PAPER T0.15X8X32
A040	97P0475000	COVER TOP	P.C.M T0.625
A041	7173401012	SCREW TAPPTITE	TT2 BIN 4X10 BK MFZN
A050	2233030000	LOCK PAINT	NO-2
A060	97P0468600	COVER BOTTOM	SECC T0.4
A061	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN
D100	97P1R2GAC1	REMOCON HANDSET AS	VR-F2GA
F801	5FSCB2022S	FUSE CERA	SEMKO T2AH 250V MF51
M01	97PP317201	PANEL FRONT AS	DV-K484/HIFI
M021	7173401211	SCREW TAPPTITE	TT2 BIN 4X12 MFZN
M022	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN
M1000	PVDKARP76Z	VCR DECK AS	DRP-7624 (ARN76Z-C,HT,CLN
AC001	97SA381500	HEAD CLEANER AS	FM,K-MECHA
AD001	97PA253471	DRUM PRICE AS	CYP-K612H
AF001	97SA251400	F/L AS	K-MECHA
A0010	97SA309700	MAIN BASE AS	K-MECHA
A0020	97S0901400	PLATE CONNECT	SECC T1.0
A0030	97S2701800	RACK F/L	PBT (4410GF) NATURAL
A0040	97SA310900	S SLANT POLE AS	G,FM,K-MECHA
A0050	97SA311000	T SLANT POLE AS	G,FM,K-MECHA
A0060	97SA308500	L LOADING AS	K-MECHA
A0070	97SA308600	R LOADING AS	K-MECHA
A0080	97SA308400	LODING RACK AS	K-MECHA
A0090	97S3101800	WASHER POLY	D3.1XD8XT0.5
A0100	97S8100700	MOTOR CAPSTAN	F2QTB12
A0110	97S3102000	SCREW TAPPTITE	TT2 BIN-P 2.6X7 MFZN
A0120	97S3004000	SPG AC HEAD	SUS304WPB D1.2
A0130	97SA311200	AC HEAD AS	K-MECHA
B1310	97S8006800	HEAD A/C	HVMZA1900AK
A0140	7391300211	NUT HEX	6N-1-5 MFZN
A0150	97S2604100	LEVER RELAY	ZDC-2
A0160	97S2701400	GEAR CAM	DELIN 500 NATURAL
A0170	97SA310700	PINCH LEVER TOT AS	K-MECHA
C0624	97S5300800	BEARING BALL	NMB(L-730ZZ SD 204H)
A0190	97SA310400	L/C BRKT TOT AS	K-MECHA

LOC	PART-CODE	PART-NAME	PART-DESC
B1910	97S8103600	L/C MOTOR	MDH2B70
B1940	5SSF1DKM10	SW CAM	MMS00320ZMBO
A0210	97SA311600	IDLER PLATE AS	K-MECHA
A0220	97S3108200	POLYWASHER	D2.6XD6.0XT0.5
1			
A0230	97S2901600	TABLE REEL	F20 BLACK
A0250	97SA310800	TENSION BAND AS	K-MECHA
A0260	97S3003500	SPG TENSION	SWPB D0.4
A0270	97SA309300	S SUB BRAKE AS	K-MECHA
A0280	97SA309400	T SUB BRAKE AS	K-MECHA
A0290	97SA309110	MAIN BRAKE AS	K-MECHA
A0310	97S8012900	HEAD FE	HVFHF0004AK
A0320	97S3102100	SCREW TAPPTITE	TT2 BIN-P 2.6X10 MFZN
A0330	97SA309000	REEL GEAR TOT AS	K-MECHA
A0340	97S3108200	POLYWASHER	D2.6XD6.0XT0.5
A0350	97S5500400	BELT REEL	CR68
A0360	97S2603500	LEVER RECORD SAFETY	F20-03 NATURAL
A0370	97SB381100	EARTH BRACKET AS	G,FM,K-MECHA
A0380	7274301011	SCREW TAPPTITE	TT3 RND 3X10 MFZN
A0390	7274301211	SCREW TAPPTITE	TT3 RND 3X12 MFZN
A0400	7274300611	SCREW TAPPTITE	TT3 RND 3X6 MFZN
A070	97S3117300	WASHER POLY	D3.6XD8XT0.5
A200	7274300611	SCREW TAPPTITE	TT3 RND 3X6 MFZN
A330	97S3903600	POLY SLIDER	D3.1XD6XT0.5
A4100	2291129004	OIL LUBRICANT	OA-305P
A4200	2291131304	GREASE	DELUXE 5221G(NAM-YOUNG)
PW01	PVPCSWD199	POWER CORD AS	KKP-419C(HOU.D077+HOLDER)
C02	47P1503600	CLAMP WIRE A	NYLON 66
C03	8-UV2500BK	TUBE VINYL	AWG1 D=25 BK
F01	4859901111	CORD POWER	KKP-419C KLCE-2F (2.1ME)
F01B	97P2316600	HOLDER AC CORD	NYLON66 UL/CSA
0M801	PVPWSWD466	AUTO VOLT REGULATOR	K884DY(F21.D1840,M-IN)
AP01	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320
AP02	2193011100	SOLDER WIRE	60 SNA 1.2D
AP03	2291050615	FLUX SOLDER	KS-892M-1
AP04	2291050312	FLUX SOLVENT	S-3000D
B01	97P0465710	COVER SHI SMPS	ET T=0.5
B02	97P0970501	PLATE SHI SMPS	ET T=0.5
CN11	97P6284000	CONN WAFER	YFAW025-105 ANGLE 3.5X4.5
CN21	97P6284300	CONN WAFER	YFAW025-108 ANGLE 3.5X4.5
C12	CBXB3A470J	C CERA SEMI	1KV SL 47PF J HR
C16	CH1TFE222M	C CERA AC	4.0KV 2200PF M AD AC250V
C19	CMXL2G333K	C MYLAR	400V MEU 0.033MF K
C23	CEXF1A102F	C ELECTRO	10V RX 1000MF 10X20
C24	CEXF1C681F	C ELECTRO	16V RX 680MF 10X20
DZ11	DBZW04P136	DIODE ZENER	BZW04P136L-5700
D11	DBYV26EL--	DIODE	BYV26EL-5700 1000V 1A
D23	DRK49----F	DIODE SCHOTTKY	RK49 LF-M1
D24	DUF5404LS-	DIODE	UF5404L-5702 400V 3A
IC11	1T0P225YBD	IC POWER SW	PWR-TOP225Y-BD
IC11A	97P4407501	RADIATOR TR	SPCC T=0.8
IC11B	7063300811	SCREW MACHINE	M/BIN 3*8 HS
IC11C	2291130215	GREASE SILICON	G-600
L11	56X0000005	COIL BEAD	BLI-7.5A
L12	56X0000007	COIL BEAD	BI-4865(5TS) BASE

LOC	PART-CODE	PART-NAME	PART-DESC
PC11	1LTV817AB-	IC PHOTO COUPLER	LTV817M CTR 80-160
R13	RS01F334J-	R M-OXIDE FILM	1W 330K OHM J
T11	57M8282200	TRANS SMPS	TSW-K884
T11A	97P5603700	INSULATION SMPS	PC T0.5
8011	PVPWJ1D466	PCB POWER CHIP AS	K884DY-AQ(97PB227700)
C11	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
C18	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
C27	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C29	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
DC1	DUS1J-----	DIODE CHIP	US1J 600V 1A
DC2	DUS1J-----	DIODE CHIP	US1J 600V 1A
DC3	DUS1D-----	DIODE CHIP	US1D 200V 1A
R11	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R12	HRFT689JCA	R CHIP	1/10 6.8 OHM J 2012
R22	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R23	HRFT181JCA	R CHIP	1/10 180 OHM J 2012
1			
R24	HRFT102GCA	R CHIP	1/10 1K OHM G 2012
R25	HRFT181GCA	R CHIP	1/10 180 OHM G 2012
R26	HRFT821GCA	R CHIP	1/10 820 OHM G 2012
R27	HRFT201JCA	R CHIP	1/10 200 OHM J 2012
8012	PVPWJRD466	PCB POWER RADIAL AS	K884DY-AQ(97PC303900)
C13	CEXF1C470D	C ELECTRO	16V RZ 47MF 5X11
C17	CCXB3A102K	79TD0222 C CERA	1KV B 1000PF K (TAPPING)
C21	CEXF1A331D	C ELECTRO	10V RZ 330MF 8X11.5
C22	CEXF1J220D	C ELECTRO	63V RZ 22MF 6.3X11.5 TP
C25	CEXF1J220D	C ELECTRO	63V RZ 22MF 6.3X11.5 TP
C26	CEXF1H220V	79TD0763 C ELECTRO	50V RSS 22MF (5X11) TP
IC21	1KA431AZ--	IC REGULATOR	KA431AZ
8013	PVPWJAD466	PCB POWER AXIAL AS	K884DY-AQ(97PA490600)
DZ12	DZZ6R8BM--	DIODE ZENER	UZ-6.8BM AUTO
D12	DZEU01Z---	DIODE	EU01Z
JP01	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP02	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP04	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP05	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
L22	5PB13857--	COIL BEAD	BI3857(AXIAL)
R21	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
U801	97P65166PA	PCB POWER	197X197X1.6T/6(K884DY-AQ)
0P101	PVPASWW054	PCB PIF MANUAL AS	K884WZ-RG/D(97PD200200)
AI01	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320
AI02	2193011100	SOLDER WIRE	60 SNA 1.2D
AI03	2291050615	FLUX SOLDER	KS-892M-1
AI04	2291050312	FLUX SOLVENT	S-3000D
AI05	2291140501	WAX COVER	
IC121	1TDA9845--	IC RF	TDA9845
L101	56B215K694	COIL PIF	KTRF-7780B
P101	97P62M05A9	CONN B/B	35238 RECEP 2.5MM 9P
P102	97P62M05A9	CONN B/B	35238 RECEP 2.5MM 9P
X121	5XE10R00AC	CRYSTAL QUARTZ	HC-49/U 10.00000MHZ 20PPM
Z101	5PK3953M--	FILTER SAW	K3953M
Z102	5PK9453M--	FILTER SAW	K9453M
Z103	5PTPS45MB-	FILTER CERA	TPS-4.5MB(TRAP)
Z104	5PTPS55MB-	FILTER CERA	TPS-5.5MB
Z105	5PCB5R500A	FILTER CERA	SFSH5.5MCB 5.5MHZ

LOC	PART-CODE	PART-NAME	PART-DESC
Z106	5PCB6R500A	FILTER CERA	SFSH6.5MCB 6.5MHZ
Z107	5PCB4R500A	FILTER CERA	SFSH4.5MCB 4.5MHZ
Z121	5PSFE574MC	FILTER CERA	SFE 5.74MC
1011	PVPAJ1W054	PCB PIF CHIP AS	K884WZ-RG/D(97PB235800)
C101	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C102	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C103	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C104	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C105	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C106	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C109	HCLK391JCA	C CHIP CERA	50V SL 390PF J 2012
C111	HCBK682KCA	C CHIP CERA	50V X7R 6800PF K 2012
C112	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C117	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C118	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C119	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C120	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C122	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C125	HCLK181JCA	C CHIP CERA	50V SL 180PF J 2012
C141	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012
C157	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C158	HCLK470JCA	C CHIP CERA	50V SL 47PF J 2012
C161	HCLK181JCA	C CHIP CERA	50V SL 180PF J 2012
IC101	1TDA9814T-	IC IF	TDA9814T
RJ01	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ02	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ03	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ04	HRF8000-EA	R CHIP	1/8 0 OHM 3216
1			
RJ05	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ06	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ07	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ08	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ09	HRF8000-EA	R CHIP	1/8 0 OHM 3216
R101	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R110	HRFT201JCA	R CHIP	1/10 200 OHM J 2012
R113	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R114	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R115	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R116	HRFT301JCA	R CHIP	1/10 300 OHM J 2012
R117	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R122	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
R123	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R127	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R131	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R132	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R133	HRFT105JCA	R CHIP	1/10 1M OHM J 2012
R134	HRFT105JCA	R CHIP	1/10 1M OHM J 2012
R135	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R138	HRFT101JCA	R CHIP	1/10 100 OHM J 2012
R139	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012
R140	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R141	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R142	HRFT270JCA	R CHIP	1/10 27 OHM J 2012
R143	HRFT132JCA	R CHIP	1/10 1.3K OHM J 2012

LOC	PART-CODE	PART-NAME	PART-DESC
R145	HRFT361JCA	R CHIP	1/10 360 OHM J 2012
1012	PVPAJRW054	PCB PIF RADIAL AS	K884WZ-RG/D(97PC311000)
C108	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C110	CEXF1E220A	C ELECTRO	25V RSM 22MF 6.3X7
C113	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C114	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C115	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C116	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C121	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C123	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)
C124	CMXM2A182J	C MYLAR	100V 1800PF J (TP)
C126	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C127	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C128	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C129	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C130	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C131	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C132	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C133	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C134	CEXF1E220A	C ELECTRO	25V RSM 22MF 6.3X7
C135	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C136	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
L102	5CPX689J2T	COIL PEAKING	6.8UH(BLU ---)
L103	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L104	5CPX150J2T	COIL PEAKING	15UH(GREN-BLK)
L105	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L106	5CPX150J2T	COIL PEAKING	15UH(GREN-BLK)
L110	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L121	5CPX472J--	COIL PEAKING	4700UH 5MM J RADIAL
Q101	TZTC3197--	TR	KTC3197 (AUTO)(388A)
Q102	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q103	TZTA1273Y-	TR	KTA1273Y(966Y)
Q104	TZSR1001--	TR	KSR1001 (AUTO)
Q105	TZSR1004--	TR	KSR1004 (AUTO)
Q106	TZSR1004--	TR	KSR1004 (AUTO)
Q107	TZSR1004--	TR	KSR1004 (AUTO)
Q108	TZSR1004--	TR	KSR1004 (AUTO)
Q109	TZSR1004--	TR	KSR1004 (AUTO)
Q110	TZSR1004--	TR	KSR1004 (AUTO)
Q111	TZSR1004--	TR	KSR1004 (AUTO)
1			
Q113	TZSR1001--	TR	KSR1001 (AUTO)
Q121	TZSR1004--	TR	KSR1004 (AUTO)
R191	RV5426203M	R SEMI FIXED	H20K-5X3-6Y-PC-MS
1013	PVPAJAW054	PCB PIF AXIAL AS	K884WZ-RG/D(97PA493900)
JP01	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP03	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP04	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP07	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP10	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP11	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP12	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP14	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP15	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP16	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP17	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP19	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP20	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP21	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP30	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP31	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP32	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP33	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
R102	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R104	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R108	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R109	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J
R111	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R112	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R118	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R119	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R121	RD-AZ273J-	R CARBON FILM	1/6 27K OHM J
R124	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J
R125	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R126	RD-AZ103J-	CARBON FILM	1/6 10K OHM J
R130	RD-AZ431J-	CARBON FILM	1/6 430 OHM J
R136	RD-AZ102J-	CARBON FILM	1/6 1K OHM J
U101	97P652061A	PCB IF MODULE	247X246X1.6T/6(K884WY-RG/
AM01	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320
AM02	2193011100	SOLDER WIRE	60 SNA 1.2D
AM03	2291050615	FLUX SOLDER	KS-892M-1
AM04	2291050312	FLUX SOLVENT	S-3000D
AM05	2291140501	WAX COVER	
BA03	97P0718400	BOARD ANT	HI-PS(HB)
BA03A	7175300812	SCREW TAPPTITE	TT2 FLT 3X8 MFZN BK
C801	CL1EE3104M	C LINE ACROSS	AC275V 0.1MF M PCX2 335 W
C804	CH1CEE472M	C CERA AC	2.5KV 4700PF M DE AC250V
C805	CH1TFB101K	C CERA AC	4.0KV 100PF K AD AC250V
C807	CEXN2G820P	C ELECTRO	400V LHS 82MF
C812	CEXF1E331F	C ELECTRO	25V RX 330MF 10X20
C813	CEXF1A102F	C ELECTRO	10V RX 1000MF 10X20
D503	DS1R481T--	LED IR	SIR-48IT(P-RANK)
D503A	97P2334200	HOLDER LED SENSOR	POM
D801	DS1WBA60--	DIODE BRIDGE	S1WBA60
D820	DZD16FB2--	DIODE ZENER	RD16FB2
IC001	12BKK8Z7AL	OSD IC	LC 74761-9709
IC401	1LA70020--	IC PRE-AMP	LA70020
IC502	1BA6209---	IC	BA6209
IC503	14ATM24C08	IC(EEPROM)	ATM24C08
IC505	1MC4558C--	IC OP AMP	MC4558C(KA4558)
JK601	97P6313700	JACK PIN	DPAM-9639
L801	5PLFSQ2014	FILTER LINE	SQ-2014 40MH
L802	5PLFSQ2014	FILTER LINE	SQ-2014 40MH
M401	97PB233200	CASE PREAMP SUB AS	DV-K807D
M401A	97P0471700	COVER SHI PREAMP	ET T0.3
M802	97P0974300	PLATE EARTH-P	ET T=0.4
1			
PJ103	97P8811516	CONN AS	5H-5S 160MM

LOC	PART-CODE	PART-NAME	PART-DESC
PJ201	97P8811614	CONN AS	6H-6S 140MM SHIELD
PJ202	97P8851210	CONN AS (Y51210)	2H-2S 100MM
PJ503	97P8810712	CONN AS (Y10712)	7H-7S, 120MM
PT01	97P6269100	CONN WAFER	00-8283-0712-00000
P101	97P62M06A9	CONN WAFER	35337 PLUG 2.5MM 9P
P102	97P62M06A9	CONN WAFER	35337 PLUG 2.5MM 9P
P402	97P62Y084A	CONN FPC	FCZ 125L(BLUE15MM)-10P
P501	97P62T112A	CONN B/B (PLUG)	TKC-GP PLUG 10P
P502	97P62T1126	CONN B/B (PLUG)	TKC-GP PLUG 6P
P504	97P62G05CM	CONN HOUSING2	GB150 RECEP 1.5MM 21P
P505	97P62G05CB	CONN HOUSING2	GB150 RECEP 1.5MM 11P
P801	97P62Y02X2	CONN WAFER	YFW800 STR 10MM 2P
RF102	97P7608300	TUNER 2 IN 1	ALTM-BG1
R599	RS02F100J-	R M-OXIDE FILM	2W 10 OHM J
R803	RW02B229J-	R WIRE WOUND	2W 2.2 OHM J
R811	RS01F821J-	R M-OXIDE FILM	1W 820 OHM J
SW501	5S70101059	SW DETECTOR	SPPB62
S501	TST5811---	TR PHOTO	ST-5811(D-RANK)
S501A	97P2343500	HOLDER TR	ABS
S502	TST5811---	TR PHOTO	ST-5811(D-RANK)
S502A	97P2343500	HOLDER TR	ABS
S504	97P0S01900	SENSOR REEL	SG-258S
T201	560202L692	COIL OSC	DEO-006
X001	5XJ14R3LAE	CRYSTAL QUARTZ	HC-49/S 14.31818MHZ 30PPM
X002	5XJ17R7LAD	CRYSTAL QUARTZ	HC-49/S 17.73447MHZ 25PPM
X301	5XE4R433BB	CRYSTAL QUARTZ	HC-49/U 4.433619MHZ 15PPM
X302	5XE3R579BB	CRYSTAL QUARTZ	HC-49/U 3.579545MHZ 15PPM
X501	5XJ16R0LAE	CRYSTAL QUARTZ	HC-49/S 16.00000MHZ 30PPM
X502	5XZR03276G	CRYSTAL QUARTZ	SO-26 32.768000KHZ 10PPM
0011	PVMPJ1W054	PCB MAIN CHIP AS	K884WZ-RG/D(97PB235500)
C001	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C003	HCQK240JCA	C CHIP CERA	50V CH 24PF J 2012
C004	HCQK240JCA	C CHIP CERA	50V CH 24PF J 2012
C005	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C006	HCBK682KCA	C CHIP CERA	50V X7R 6800PF K 2012
C009	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C010	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C013	HCLK221JCA	C CHIP CERA	50V SL 220PF J 2012
C014	HCLK221JCA	C CHIP CERA	50V SL 220PF J 2012
C015	HCLK221JCA	C CHIP CERA	50V SL 220PF J 2012
C016	HCQK130JCA	C CHIP CERA	50V CH 13PF J 2012
C017	HCQK130JCA	C CHIP CERA	50V CH 13PF J 2012
C018	HCLK560JCA	C CHIP CERA	50V SL 56PF J 2012
C021	HCQK150JCA	C CHIP CERA	50V CH 15PF J 2012
C022	HCQK150JCA	C CHIP CERA	50V CH 15PF J 2012
C023	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C171	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C172	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C173	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C175	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C177	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C184	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C187	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C204	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012
C205	HCBK153KCA	C CHIP CERA	50V X7R 0.015MF K 2012

LOC	PART-CODE	PART-NAME	PART-DESC
C206	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C209	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C218	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C220	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C221	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C233	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012
C240	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C271	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C272	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
1			
C273	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C281	HCBK682KCA	C CHIP CERA	50V X7R 6800PF K 2012
C282	HCBK682KCA	C CHIP CERA	50V X7R 6800PF K 2012
C302	HCBK473KCA	C CHIP CERA	50V X7R 0.047MF K 2012
C307	HCLK509CCA	C CHIP CERA	50V SL 5PF C 2012
C308	HCLK270JCA	C CHIP CERA	50V SL 27PF J 2012
C310	HCLK220JCA	C CHIP CERA	50V SL 22PF J 2012
C311	HCLK391JCA	C CHIP CERA	50V SL 390PF J 2012
C312	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C314	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C319	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C323	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C328	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C329	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C332	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C335	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C336	HCBK473KCA	C CHIP CERA	50V X7R 0.047MF K 2012
C338	HCBK473KCA	C CHIP CERA	50V X7R 0.047MF K 2012
C344	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C345	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C347	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C348	HCLK101JCA	C CHIP CERA	50V SL 100PF J 2012
C349	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C350	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
C355	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C356	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C357	HCLK680JCA	C CHIP CERA	50V SL 68PF J 2012
C358	HCLK680JCA	C CHIP CERA	50V SL 68PF J 2012
C359	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C360	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C361	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C390	HCLK300JCA	C CHIP CERA	50V SL 30PF J 2012
C403	HCLK201JCA	C CHIP CERA	50V SL 200PF J 2012
C404	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C405	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C406	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C407	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C408	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C409	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C410	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012
C411	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C413	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C416	HCBK104KCA	C CHIP CERA	50V X7R 0.1MF K 2012
C453	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C454	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012

LOC	PART-CODE	PART-NAME	PART-DESC
C456	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C457	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C458	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C502	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C503	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C506	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C508	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012
C509	HCQK200JCA	C CHIP CERA	50V CH 20PF J 2012
C510	HCQK150JCA	C CHIP CERA	50V CH 15PF J 2012
C511	HCQK130JCA	C CHIP CERA	50V CH 13PF J 2012
C513	HCBK103KCA	C CHIP CERA	0V X7R 0.01MF K 2012
C514	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012
C522	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C525	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C526	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C528	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C529	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C530	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C531	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C532	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C534	HCBK272KCA	C CHIP CERA	50V X7R 2700PF K 2012
1			
C541	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C542	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C543	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C544	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C603	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C605	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C607	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C609	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C814	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C820	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C821	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C824	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
IC251	1BH7804K--	IC HIFI	BH7804K
IC301	1LA71501BM	IC AV MULTI ONE CHIP	LA71501BM
IC302	1LC89978M-	IC CCD	LC89978M
IC501	168KKVZGTS	MICOM IC	M37775M7H-159GP
RJ001	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ002	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ003	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ004	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ005	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ006	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ009	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ010	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ011	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ012	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ013	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ014	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ015	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ016	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ017	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ018	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ019	HRF8000-EA	R CHIP	1/8 0 OHM 3216

LOC	PART-CODE	PART-NAME	PART-DESC
RJ020	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ021	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ023	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ024	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ026	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ027	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ028	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ030	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ032	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ033	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ034	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ035	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ037	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ038	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ039	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ041	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ045	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ046	HRF8000-EA	R CHIP	1/8 0 OHM 3216
R001	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R002	HRFT121JCA	R CHIP	1/10 120 OHM J 2012
R003	HRFT682JCA	R CHIP	1/10 6.8K OHM J 2012
R004	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012
R005	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R008	HRFT204JCA	R CHIP	1/10 200K OHM J 2012
R015	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R172	HRFT563JCA	R CHIP	1/10 56K OHM J 2012
R182	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R184	HRFT303JCA	R CHIP	1/10 30K OHM J 2012
R185	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R186	HRFT183JCA	R CHIP	1/10 18K OHM J 2012
R190	HRFT563JCA	R CHIP	1/10 56K OHM J 2012
R201	HRFT225JCA	R CHIP	1/10 2.2M OHM J 2012
R203	HRFT512JCA	R CHIP	1/10 5.1K OHM J 2012
1			
R205	HRFT681JCA	R CHIP	1/10 680 OHM J 2012
R208	HRFT392JCA	R CHIP	1/10 3.9K OHM J 2012
R210	HRFT470JCA	R CHIP	1/10 47 OHM J 2012
R211	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012
R212	HRFT229JCA	R CHIP	1/10 2.2 OHM J 2012
R213	HRFT229JCA	R CHIP	1/10 2.2 OHM J 2012
R215	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R216	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R217	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R221	HRFT304JCA	R CHIP	1/10 300K OHM J 2012
R222	HRFT181JCA	R CHIP	1/10 180 OHM J 2012
R224	HRFT123JCA	R CHIP	1/10 12K OHM J 2012
R225	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R256	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
R257	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
R258	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R260	HRFT392JCA	R CHIP	1/10 3.9K OHM J 2012
R262	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R263	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R278	HRFT163JCA	R CHIP	1/10 16K OHM J 2012
R279	HRFT163JCA	R CHIP	1/10 16K OHM J 2012

LOC	PART-CODE	PART-NAME	PART-DESC
R280	HRFT241JCA	R CHIP	1/10 240 OHM J 2012
R281	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R301	HRFT391JCA	R CHIP	1/10 390 OHM J 2012
R302	HRFT112JCA	R CHIP	1/10 1.1K OHM J 2012
R303	HRFT391JCA	R CHIP	1/10 390 OHM J 2012
R306	HRFT272JCA	R CHIP	1/10 2.7K OHM J 2012
R307	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012
R308	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R309	HRFT122JCA	R CHIP	1/10 1.2K OHM J 2012
R310	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R311	HRFT822JCA	R CHIP	1/10 8.2K OHM J 2012
R312	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012
R315	HRFT302JCA	R CHIP	1/10 3K OHM J 2012
R321	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R324	HRFT183JCA	R CHIP	1/10 18K OHM J 2012
R325	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R326	HRFT202JCA	R CHIP	1/10 2K OHM J 2012
R327	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R328	HRFT183JCA	R CHIP	1/10 18K OHM J 2012
R329	HRFT333JCA	R CHIP	1/10 33K OHM J 2012
R330	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R332	HRFT104JCA	R CHIP	1/10 100K OHM J 2012
R335	HRFT222JCA	R CHIP	1/10 2.2K OHM J 2012
R336	HRFT331JCA	R CHIP	1/10 330 OHM J 2012
R337	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R338	HRFT104JCA	R CHIP	1/10 100K OHM J 2012
R401	HRFT242JCA	R CHIP	1/10 2.4K OHM J 2012
R402	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R403	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R406	HRFT470JCA	R CHIP	1/10 47 OHM J 2012
R412	HRFT183JCA	R CHIP	1/10 18K OHM J 2012
R451	HRFT132JCA	R CHIP	1/10 1.3K OHM J 2012
R452	HRFT471JCA	R CHIP	1/10 470 OHM J 2012
R501	HRFT133JCA	R CHIP	1/10 13K OHM J 2012
R502	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R504	HRFT511JCA	R CHIP	1/10 510 OHM J 2012
R505	HRFT511JCA	R CHIP	1/10 510 OHM J 2012
R506	HRFT474JCA	R CHIP	1/10 470K OHM J 2012
R510	HRFT331JCA	R CHIP	1/10 330 OHM J 2012
R511	HRFT331JCA	R CHIP	1/10 330 OHM J 2012
R512	HRFT331JCA	R CHIP	1/10 330 OHM J 2012
R515	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R518	HRFT201JCA	R CHIP	1/10 200 OHM J 2012
R519	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
R521	HRFT273JCA	R CHIP	1/10 27K OHM J 2012
1			
R525	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R526	HRFT912JCA	R CHIP	1/10 9.1K OHM J 2012
R527	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R528	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R529	HRFT752JCA	R CHIP	1/10 7.5K OHM J 2012
R531	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R532	HRFT221JCA	R CHIP	1/10 220 OHM J 2012
R533	HRFT752JCA	R CHIP	1/10 7.5K OHM J 2012
R534	HRFT105JCA	R CHIP	1/10 1M OHM J 2012

LOC	PART-CODE	PART-NAME	PART-DESC
R541	HRFT105JCA	R CHIP	1/10 1M OHM J 2012
R544	HRFT104JCA	R CHIP	1/10 100K OHM J 2012
R546	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R547	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R548	HRFT101JCA	R CHIP	1/10 100 OHM J 2012
R549	HRFT101JCA	R CHIP	1/10 100 OHM J 2012
R550	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R551	HRFT474JCA	R CHIP	1/10 470K OHM J 2012
R552	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R563	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R565	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R566	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012
R572	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R573	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R574	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R580	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R588	HRFT393JCA	R CHIP	1/10 39K OHM J 2012
R590	HRFT751JCA	R CHIP	1/10 750 OHM J 2012
R591	HRFT473JCA	R CHIP	1/10 47K OHM J 2012
R601	HRFT750JCA	R CHIP	1/10 75 OHM J 2012
R602	HRFT750JCA	R CHIP	1/10 75 OHM J 2012
R621	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R622	HRFT222JCA	R CHIP	1/10 2.2K OHM J 2012
R625	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R626	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R627	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R628	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R629	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R630	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R631	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R632	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R633	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R634	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R635	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R636	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R637	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R638	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R639	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R640	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R641	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R642	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R643	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R644	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R645	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R646	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R814	HRFT303JCA	R CHIP	1/10 30K OHM J 2012
R816	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
0012	PVMPJRW054	PCB MAIN RADIAL AS	K884WZ-RG/D(97PC310800)
C002	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C007	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C008	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7
C012	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C019	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C174	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7
C176	CEXF1E220A	C ELECTRO	25V RSM 22MF 6.3X7

LOC	PART-CODE	PART-NAME	PART-DESC
C178	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C179	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
1			
C183	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C188	CMXL1J104K	C MYLAR	MEU 63V 0.1MF K
C189	CMXL1J104K	C MYLAR	MEU 63V 0.1MF K
C190	CMXL1J104K	C MYLAR	MEU 63V 0.1MF K
C201	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7
C203	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C207	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C208	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C210	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)
C211	CMXM2A333J	C MYLAR	100V 0.033MF J (TP)
C212	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C213	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C214	CMXM2A102J	C MYLAR	100V 1000PF J (TP)
C215	CMXM2A122J	C MYLAR	100V 1200PF J (TP)
C216	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C217	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7
C219	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C222	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C223	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C252	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C253	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C255	CMXM2A472J	C MYLAR	100V 4700PF J (TP)
C256	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C257	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C258	CMXM2A472J	C MYLAR	100V 4700PF J (TP)
C260	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C261	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C262	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C263	CMXM2A223J	C MYLAR	100V 0.022MF J TP
C264	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C266	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C267	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C268	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C301	CEXF1H108A	C ELECTRO	50V RSM 0.1MF 4X7
C309	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C316	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C317	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C320	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C322	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C324	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C325	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C326	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C327	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C330	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C331	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C333	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C337	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C343	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C401	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C402	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP
C451	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C459	CEXF1H109A	C ELECTRO	50V RSM 1MF (4X7) TP

LOC	PART-CODE	PART-NAME	PART-DESC
C501	CDXA0H104K	C SUPER	5.5V 0.1F TAPING
C504	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP
C517	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C519	CEXF1A101A	C ELECTRO	10V RSM 100MF 6.3X7
C520	CEXF1H479A	C ELECTRO	50V RSM 4.7MF 4X7
C521	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C524	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C546	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C601	CEXF1A471V	C ELECTRO	10V RSS 470MF 8X11.5
C602	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C604	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C606	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C608	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C620	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
1			
C621	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C815	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP
C816	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C817	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C818	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C819	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C823	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C825	CEXF1H100A	C ELECTRO	50V RSM 10MF (5X7) TP
C826	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C827	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
D815	1KA33V----	IC ZENER	KA33V
F801A	97P460170P	CLIP FUSE	PFC5000-0702
F801B	97P460170P	CLIP FUSE	PFC5000-0702
IC504	1KA7533Z--	IC SWITCH RESET	KA7533Z
L001	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L002	5CPX569G-T	COIL PEAKING	EL0405RA 5R6G RADIAL (TP)
L003	5CPX220J2T	COIL PEAKING	22UH(RED-BLK)
L004	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L171	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L172	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L201	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L251	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L252	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L301	5CPX560J--	COIL PEAKING	56UH J (RADIAL)
L302	5CPX121J--	COIL PEAKING	120UH J (RADIAL)
L304	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L305	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L306	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L401	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L451	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L811	56C220K686	COIL CHOKE	22UH K 27.5X0.4D
L812	56C220K695	COIL CHOKE(CAP TYPE)	22UH K (CAP TYPE) 9X11.1
L813	56C220K686	COIL CHOKE	22UH K 27.5X0.4D
Q001	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q171	TZSR2001--	TR	KSR2001 (AUTO)
Q172	TZSR2001--	TR	KSR2001 (AUTO)
Q173	TZSR2001--	TR	KSR2001 (AUTO)
Q174	TZSR1004--	TR	KSR1004 (AUTO)
Q175	TZSR1004--	TR	KSR1004 (AUTO)
Q176	TZSR1004--	TR	KSR1004 (AUTO)

LOC	PART-CODE	PART-NAME	PART-DESC
Q177	TZTA1273Y-	TR	KTA1273Y(966Y)
Q178	TZSR1001--	TR	KSR1001 (AUTO)
Q179	TZTA1273Y-	TR	KTA1273Y(966Y)
Q180	TZSR1001--	TR	KSR1001 (AUTO)
Q181	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q201	TZTC3202Y-	TR	KTC3202Y (AUTO)(1959Y)
Q202	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q203	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q204	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q205	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q206	TZSR1004--	TR	KSR1004 (AUTO)
Q251	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q301	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q302	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q303	TZTA1266Y-	TR	KTA1266Y- (AUTO)(1015Y)
Q304	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q305	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q306	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q307	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q501	TZSR1001--	TR	KSR1001 (AUTO)
Q502	TZTA1273Y-	TR	KTA1273Y(966Y)
Q503	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q504	TZTA1273Y-	TR	KTA1273Y(966Y)
Q506	TZSR1001--	TR	KSR1001 (AUTO)
Q601	TZTA1273Y-	TR	KTA1273Y(966Y)
Q811	TZTC3205Y-	TR	KTC3205Y (2236Y)
1			
Q812	TZTC3205Y-	TR	KTC3205Y (2236Y)
Q813	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q814	TZTA1273Y-	TR	KTA1273Y(966Y)
Q815	TZTC3205Y-	TR	KTC3205Y (2236Y)
Q816	TZTC3205Y-	TR	KTC3205Y (2236Y)
0013	PVMPJAW054	PCB MAIN AXIAL AS	K884WZ-RG/D(97PA493800)
C180	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C181	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C182	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C202	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C304	CBZF1E223Z	C CERA SEMI	25V Y5V 0.022MF Z
C305	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C306	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C313	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C315	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C321	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C334	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C340	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C341	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C342	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C346	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C352	CBZF1E223Z	C CERA SEMI	25V Y5V 0.022MF Z
C353	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C354	CCZF1H104Z	C CERA	50V HIKF 0.1MF Z
C505	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
C516	CCZB1H102K	C CERA	50V B 1000PF K
C523	CCZB1H102K	C CERA	50V B 1000PF K
C527	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M

LOC	PART-CODE	PART-NAME	PART-DESC
C545	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
D171	DZN4148---	DIODE	1N4148 AUTO 52MM
D251	DZN4148---	DIODE	1N4148 AUTO 52MM
D301	DZN4148---	DIODE	1N4148 AUTO 52MM
D501	DZN4148---	DIODE	1N4148 AUTO 52MM
D502	DZN4148---	DIODE	1N4148 AUTO 52MM
D504	DZZ6R2BM--	DIODE ZENER	UZ6.2BM (AUTO)
D505	DZN4148---	DIODE	1N4148 AUTO 52MM
D507	DZN4148---	DIODE	1N4148 AUTO 52MM
D509	DZN4003---	DIODE	IN4003(DAEBO)
D510	DZN4148---	DIODE	1N4148 AUTO 52MM
D511	DZN4003---	DIODE	IN4003(DAEBO)
D512	DZN4003---	DIODE	IN4003(DAEBO)
D513	DZN4148---	DIODE	1N4148 AUTO 52MM
D811	DZN4003---	DIODE	IN4003(DAEBO)
D812	DZN4003---	DIODE	IN4003(DAEBO)
D813	DZN4003---	DIODE	IN4003(DAEBO)
D814	DZZ10BM---	DIODE ZENER	UZ-10BM
D816	DZUZ5R6BSB	DIODE ZENER	UZ-5.6BSB(5.46-5.70V)
D817	DZZ7R5BM--	DIODE ZENER	UZ-7.5BM
D818	DZZ10BM---	DIODE ZENER	UZ-10BM
D819	DZN4148---	DIODE	1N4148 AUTO 52MM
D822	DZN4003---	DIODE	IN4003(DAEBO)
D823	DZN4003---	DIODE	IN4003(DAEBO)
D824	DZUZ3R9BSA	DIODE ZENER	UZ-3.9BSA(3.77-3.98V
JP018	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP019	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP020	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP021	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP024	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP025	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP026	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP027	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP028	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP029	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP030	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
L307	5PB13857--	COIL BEAD	BI3857(AXIAL)
R006	RD-AZ821J-	R CARBON FILM	1/6 820 OHM J
1			
R007	RD-4Z471J-	R CARBON FILM	1/4 470 OHM J
R161	RD-AZ399J-	R CARBON FILM	1/6 3.9 OHM J
R171	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R176	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R177	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R181	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R183	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R189	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R198	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R199	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R202	RD-AZ123J-	R CARBON FILM	1/6 12K OHM J
R204	RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J
R206	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R207	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J
R209	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R214	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J

LOC	PART-CODE	PART-NAME	PART-DESC
R218	RD-AZ561J-	R CARBON FILM	1/6 560 OHM J
R219	RD-AZ182G-	R CARBON FILM	1/6 1.8K OHM G
R220	RD-AZ303J-	R CARBON FILM	1/6 30K OHM J
R223	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J
R226	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R255	RD-AZ225J-	R CARBON FILM	1/6 2.2M OHM J
R264	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R265	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R268	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R269	RD-AZ562J-	R CARBON FILM	1/6 5.6K OHM J
R276	RD-AZ513J-	R CARBON FILM	1/6 51K OHM J
R277	RD-AZ513J-	R CARBON FILM	1/6 51K OHM J
R304	RD-AZ820J-	R CARBON FILM	1/6 82 OHM J
R313	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R314	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J
R316	RD-AZ122J-	R CARBON FILM	1/6 1.2K OHM J
R317	RD-AZ513J-	R CARBON FILM	1/6 51K OHM J
R318	RD-AZ513J-	R CARBON FILM	1/6 51K OHM J
R319	RD-AZ202J-	R CARBON FILM	1/6 2K OHM J
R320	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R322	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R323	RD-AZ333J-	R CARBON FILM	1/6 33K OHM J
R331	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R333	RD-AZ104J-	R CARBON FILM	1/6 100K OHM J
R334	RD-AZ155J-	R CARBON FILM	1/6 1.5M OHM J
R404	RD-AZ823J-	R CARBON FILM	1/6 82K OHM J
R405	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R453	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R503	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R507	RD-AZ304J-	R CARBON FILM	1/6 300K OHM J
R508	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R509	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R513	RD-AZ153J-	R CARBON FILM	1/6 15K OHM J
R514	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R520	RD-AZ201J-	R CARBON FILM	1/6 200 OHM J
R522	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J
R523	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R524	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R530	RD-AZ391J-	R CARBON FILM	1/6 390 OHM J
R536	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R537	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R538	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R539	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R540	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R542	RD-AZ511J-	R CARBON FILM	1/6 510 OHM J
R543	RD-4Z106J-	R CARBON FILM	1/4 10M OHM J
R553	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R554	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R555	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
R556	RD-AZ182J-	R CARBON FILM	1/6 1.8K OHM J
1			
R557	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R558	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R559	RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J
R560	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J

LOC	PART-CODE	PART-NAME	PART-DESC
R561	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R562	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R571	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J
R576	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R577	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R579	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R582	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R583	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R584	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J
R585	RD-AZ242J-	R CARBON FILM	1/6 2.4K OHM J
R586	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R587	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R589	RD-AZ753J-	R CARBON FILM	1/6 75K OHM J
R592	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J
R603	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R604	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R605	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R606	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J
R801	RC-2Z565K0	R CARBON COMP	1/2 5.6M OHM K
R802	RC-2Z565K0	R CARBON COMP	1/2 5.6M OHM K
R812	RD-AZ150J-	R CARBON FILM	1/6 15 OHM J
R813	RD-4Z622J-	R CARBON FILM	1/4 6.2K OHM J
R815	RD-4Z511J-	R CARBON FILM	1/4 510 OHM J
R817	RD-2Z391J-	R CARBON FILM	1/2 390 OHM J
R818	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J
R819	RD-AZ470J-	R CARBON FILM	1/6 47 OHM J
R820	RD-4Z511J-	R CARBON FILM	1/4 510 OHM J
U301	97P65204MA	PCB MAIN	330X247X1.6T(K884WY-RG/D)
0014	PVMPJVW054	PCB MAIN J/V ONLY AS	K884WZ-RG/D(204MA,HIFI)
JP002	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP003	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP007	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP008	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP009	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP010	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP011	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP012	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP014	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP015	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP016	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP017	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP023	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP031	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP032	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP033	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP034	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP035	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP036	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP037	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP038	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP039	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP040	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP041	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP042	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP043	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP044	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP045	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP046	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP047	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP048	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP049	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP050	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
1			
JP051	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP052	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP053	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP054	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP056	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP057	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP058	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP059	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP060	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP061	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP062	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP063	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP064	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP065	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP066	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP067	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP068	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP069	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP070	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP071	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP072	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP073	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP074	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP075	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP076	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP077	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP078	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP079	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP080	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP081	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP082	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP083	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP084	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP085	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP086	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP087	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP088	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP089	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP090	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP091	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP092	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP094	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP095	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP096	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP097	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP098	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP099	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP100	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP102	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP103	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP104	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP105	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP106	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP107	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP108	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP109	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP111	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP112	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP113	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP115	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP116	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP117	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP118	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP119	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP120	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP121	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
1			
JP122	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP123	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP124	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP125	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP126	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP127	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP128	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP129	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP130	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP131	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP132	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP133	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP134	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP135	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP136	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP137	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP138	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP139	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP140	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP141	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP142	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP143	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP144	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP145	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP146	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP147	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP148	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP149	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP150	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP151	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP152	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP153	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP154	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP155	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP156	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP157	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP158	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP159	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP160	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP161	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP162	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP163	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP164	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP165	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP166	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP167	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP168	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP169	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP170	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP171	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP172	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP173	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP174	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP175	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP176	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP177	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP178	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP179	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP180	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP181	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP182	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP183	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP184	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP185	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP186	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP187	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
1			
JP188	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP189	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP190	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP191	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP192	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP193	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP194	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP195	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP196	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP197	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP198	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP199	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP200	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP201	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP202	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP203	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP204	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP205	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP206	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP207	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP208	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP209	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP210	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP211	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP212	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP213	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP214	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP215	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP216	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP217	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP218	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP219	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP220	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP221	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP222	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP223	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP224	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP225	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP226	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP227	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP228	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP229	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP230	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP231	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP232	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP233	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP234	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP235	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP236	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP237	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP238	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP240	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP241	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP242	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP244	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP245	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP246	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP247	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP248	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP249	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP250	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP251	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP253	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP254	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP258	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP259	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
1			
JP260	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP261	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP263	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP264	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP265	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP266	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP267	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP268	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP269	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP270	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP271	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING

LOC	PART-CODE	PART-NAME	PART-DESC
JP272	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
003	PVLASWW054	PCB LOGIC MANUAL AS	K884WZ-RG/D(D528-C)
AL01	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320
AL02	2193011100	SOLDER WIRE	60 SNA 1.2D
AL03	2291050615	FLUX SOLDER	KS-892M-1
AL04	2291050312	FLUX SOLVENT	S-3000D
AL05	2291140501	WAX COVER	
AL07	2291051101	FLUX ANTI	KF-9000
G701	DSVV6SS25-	DIGITRON	SVV-6SS25
G701A	97P2340500	HOLDER DIGITRON	PP
G701B	2TU07018CL	TAPE VINYL	0.07TX18MM CLEAR
H701	1GP1U271R-	IC UNIT R/RECEIVER	GP1U271R
JK701	97P6311300	JACK PIN	DSP-9407A
JK71A	97P0973700	PLATE EARTH AV	SUS304 CSP T0.15
P701	97P62G04CM	CONN HOUSING1	GB150 RECEP 1.5MM 21P
P701A	97P62G03CM	CONN WAFER	GB150 PLUG 1.5MM 21P
P702	97P62G04CB	CONN HOUSING1	GB150 RECEP 1.5MM 11P
P702A	97P62G03CB	CONN WAFER	GB150 PLUG 1.5MM 11P
P703	97P6271300	CONN WAFER (ANGLE)	00-8283-0511-00000
0031	PVLAJRD528	PCB LOGIC RADIAL AS	K884DY-RG/J(D466-S)
C701	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C703	CXSL1H470J	C CERA	50V SL 47PF J
C704	CXSL1H470J	C CERA	50V SL 47PF J
C751	CXSL1H101J	C CERA	50V SL 100PF J
C752	CXSL1H101J	C CERA	50V SL 100PF J
SW701	5S50101Z90	SW TACT	SKHV10910A
SW702	5S50101Z90	SW TACT	SKHV10910A
SW703	5S50101Z90	SW TACT	SKHV10910A
SW704	5S50101Z90	SW TACT	SKHV10910A
SW705	5S50101Z90	SW TACT	SKHV10910A
SW706	5S50101Z90	SW TACT	SKHV10910A
SW707	5S50101Z90	SW TACT	SKHV10910A
SW708	5S50101Z90	SW TACT	SKHV10910A
0032	PVLAJAW054	PCB LOGIC AXIAL AS	K884WZ-RG/D(D528-C)
C702	CBZP1C103M	C CERA SEMI	16V Y5S 0.01MF M
D707	DZN4148---	DIODE	1N4148 AUTO 52MM
D711	DZN4148---	DIODE	1N4148 AUTO 52MM
D712	DZN4148---	DIODE	1N4148 AUTO 52MM

LOC	PART-CODE	PART-NAME	PART-DESC
D713	DZN4148---	DIODE	1N4148 AUTO 52M
D714	DZN4148---	DIODE	1N4148 AUTO 52MM
JP701	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP702	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP703	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP704	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP707	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP710	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP711	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP712	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP713	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP714	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP715	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP716	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP717	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP718	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP720	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
1			
JP721	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP722	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP723	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP724	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP725	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP726	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP727	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP728	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP729	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP730	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP731	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP732	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
R701	RD-4Z200J-	R CARBON FILM	1/4 20 OHM J
R702	RD-AZ510J-	79TD0161 R CARBON FILM	1/6 51 OHM J
R703	RD-AZ510J-	79TD0161 R CARBON FILM	1/6 51 OHM J
R751	RD-AZ102J-	79TD2015 R CARBON FILM	1/6 1K OHM J
R752	RD-AZ102J-	79TD2015 R CARBON FILM	1/6 1K OHM J
R753	RD-AZ750J-	79TD0883 R CARBON FILM	1/6 75 OHM J
U701	97P65172LA	PCB LOGIC	330X246X1.6T (K884DY-AQ)

PCB IF MODULE AS (4HD/2HD)

LOC	PART-CODE	PART-NAME	PART-DESC
AI01	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320
AI02	2193011100	SOLDER WIRE	60 SNA 1.2D
AI03	2291050615	FLUX SOLDER	KS-892M-1
AI04	2291050312	FLUX SOLVENT	S-3000D
AI05	2291140501	WAX COVER	0.0002
L101	56B215K694	COIL PIF	KTRF-7780B
P101	97P62M05A9	CONN B/B	35238 RECEP 2.5MM 9P
P102	97P62M05A9	CONN B/B	35238 RECEP 2.5MM 9P
Z101	5PK3953M--	FILTER SAW	K3953M
Z102	5PK9453M--	FILTER SAW	K9453M
Z103	5PTPS45MB-	FILTER CERA	TPS-4.5MB(TRAP)
Z104	5PTPS55MB-	FILTER CERA	TPS-5.5MB
Z105	5PCB5R500A	FILTER CERA	SFSH5.5MCB 5.5MHZ
Z106	5PCB6R500A	FILTER CERA	SFSH6.5MCB 6.5MHZ
Z107	5PCB4R500A	FILTER CERA	SFSH4.5MCB 4.5MHZ
1011	PVPAJ1W055	PCB PIF CHIP AS	¡ K484WZ-RG/D(B2403,W054-C ¡ -
C101	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C102	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C103	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C104	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C105	HCLK471JCA	C CHIP CERA	50V SL 470PF J 2012
C106	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C109	HCLK391JCA	C CHIP CERA	50V SL 390PF J 2012
C111	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
C112	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C117	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C118	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C119	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C120	HCBK103KCA	C CHIP CERA	50V X7R 0.01MF K 2012
C141	HCFK223ZCA	C CHIP CERA	50V Y5V 0.022MF Z 2012
C157	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012
C158	HCLK470JCA	C CHIP CERA	50V SL 47PF J 2012
IC101	1TDA9814T-	IC IF	TDA9814T
RJ01	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ02	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ03	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ04	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ05	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ06	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ07	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ08	HRF8000-EA	R CHIP	1/8 0 OHM 3216
RJ09	HRF8000-EA	R CHIP	1/8 0 OHM 3216
R101	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R110	HRFT201JCA	R CHIP	1/10 200 OHM J 2012
R113	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R114	HRFT223JCA	R CHIP	1/10 22K OHM J 2012
R115	HRFT561JCA	R CHIP	1/10 560 OHM J 2012
R116	HRFT301JCA	R CHIP	1/10 300 OHM J 2012
R117	HRFT519JCA	R CHIP	1/10 5.1 OHM J 2012
R131	HRFT332JCA	R CHIP	1/10 3.3K OHM J 2012
R135	HRFT103JCA	R CHIP	1/10 10K OHM J 2012
R138	HRFT101JCA	R CHIP	1/10 100 OHM J 2012
R139	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012
R140	HRFT102JCA	R CHIP	1/10 1K OHM J 2012
R141	HRFT471JCA	R CHIP	1/10 470 OHM J 2012

LOC	PART-CODE	PART-NAME	PART-DESC
R142	HRFT270JCA	R CHIP	1/10 27 OHM J 2012
R143	HRFT132JCA	R CHIP	1/10 1.3K OHM J 2012
R145	HRFT361JCA	R CHIP	1/10 360 OHM J 2012
1012	PVPAJRW055	PCB PIF RADIAL AS	¡ K484WZ-RG/D(C3147,W054-C) ¡ -
C108	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C110	CEXF1E220A	C ELECTRO	25V RSM 22MF 6.3X7
C113	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C114	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C115	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
C116	CEXF1C470A	C ELECTRO	16V RSM 47MF (5X7) TP
C142	CEXF1H229A	C ELECTRO	50V RSM 2.2MF (4X7) TP
L102	5CPX689J2T	COIL PEAKING	6.8UH(BLU ---)
L103	5CPX100J2T	COIL PEAKING	10UH(BRN-BLK)
L104	5CPX150J2T	COIL PEAKING	15UH(GREN-BLK)
L105	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
L106	5CPX150J2T	COIL PEAKING	15UH(GREN-BLK)
L110	5CPX101J2T	COIL PEAKING	100UH(BRN-BRN)
Q101	TZTC3197--	TR	KTC3197 (AUTO)(388A)
Q102	TZTC3198Y-	TR	KTC3198Y-(1815Y) (AUTO)
Q103	TZTA1273Y-	TR	KTA1273Y(966Y)
Q104	TZSR1001--	TR	KSR1001 (AUTO)
Q105	TZSR1004--	TR	KSR1004 (AUTO)
Q106	TZSR1004--	TR	KSR1004 (AUTO)
Q107	TZSR1004--	TR	KSR1004 (AUTO)
Q108	TZSR1004--	TR	KSR1004 (AUTO)
Q109	TZSR1004--	TR	KSR1004 (AUTO)
Q110	TZSR1004--	TR	KSR1004 (AUTO)
Q111	TZSR1004--	TR	KSR1004 (AUTO)
Q113	TZSR1001--	TR	KSR1001 (AUTO)
R191	RV5426203M	R SEMI FIXED	H20K-5X3-6Y-PC-MS
1013	PVPAJAW055	PCB PIF AXIAL AS	¡ K484WZ-RG/D(A4965,W054-C) ¡ -
JP01	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP03	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP04	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP06	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP07	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP08	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP09	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP10	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP12	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP13	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP14	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP15	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP16	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP17	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP21	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP30	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP31	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP32	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP33	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
JP34	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING
R102	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R104	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R108	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
R109	RD-AZ151J-	R CARBON FILM	1/6 150 OHM J

LOC	PART-CODE	PART-NAME	PART-DESC
R111	RD-AZ221J-	R CARBON FILM	1/6 220 OHM J
R112	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J
R118	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R119	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J
R136	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J
U101	97P652061A	PCB IF MODULE	247X246X1.6T/6(K884WY-RG/

SECTION 13. OPTION TABLE

13-1. HEAD OPTION

	Hi-Fi		4HEAD		2HEAD	
LOC	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION
B001	97P0718400	HI-PS(HB)	97P0717100	HI-PS(HB)	97P0717100	HI-PS(HB)
IC401	1LA70020--	LA70020	1LA70011--	LA70011	1LA70001--	LA70001
JK601	97P6313700	DPAM-9639	97P6313600	DPAM-9640	97P6313600	DPAM-9640
PJ103	97P8811516	5H-5S 160MM				
P402	97P62Y084A	FCZ 125L(BLUE15MM)-10P	97P62Y0847	FCZ 125L(BLUE15MM)-07P	97P62Y1044	FCZ 125R(BLACK15MM)-04P
C204	HCBK102KCA	50V X7R 1000PF K 2012				
C271	HCLK101JCA	50V SL 100PF J 2012				
C272	HCLK101JCA	50V SL 100PF J 2012				
C273	HCBK103KCA	50V X7R 0.01MF K 2012				
C281	HCBK682KCA	50V X7R 6800PF K 2012				
C282	HCBK682KCA	50V X7R 6800PF K 2012				
C406	HCFK104ZCA	50V Y5V 0.1MF Z 2012	HCFK104ZCA	50V Y5V 0.1MF Z 2012		
C407	HCBK103KCA	50V X7R 0.01MF K 2012	HCBK103KCA	50V X7R 0.01MF K 2012		
C410	HCBK102JCA	50V X7R 1000PF K 2012	HCBK102JCA	50V X7R 1000PF K 2012		
C411	HCBK102JCA	50V X7R 1000PF K 2012	HCBK102JCA	50V X7R 1000PF K 2012		
C453	HCFK104ZCA	50V Y5V 0.1MF Z 2012				
C454	HCBK103KCA	50V X7R 0.01MF K 2012				
C456	HCBK103KCA	50V X7R 0.01MF K 2012				
C457	HCBK103KCA	50V X7R 0.01MF K 2012				
C458	HCFK104ZCA	50V Y5V 0.1MF Z 2012				
C824	HCBK103KCA	50V X7R 0.01MF K 2012				
IC251	1BH7804K--	BH7804K				
RJ022			HRF8000-EA	1/8 0 OHM 3216	HRF8000-EA	1/8 0 OHM 3216
RJ029			HRF8000-EA	1/8 0 OHM 3216	HRF8000-EA	1/8 0 OHM 3216
RJ030	HRF8000-EA	1/8 0 OHM 3216				
RJ036			HRF8000-EA	1/8 0 OHM 3216	HRF8000-EA	1/8 0 OHM 3216
R208	HRFT392JCA	1/10 3.9K OHM J 2012				
R256	HRFT273JCA	1/10 27K OHM J 2012				
R257	HRFT273JCA	1/10 27K OHM J 2012				
R258	HRFT473JCA	1/10 47K OHM J 2012				
R260	HRFT392JCA	1/10 3.9K OHM J 2012				
R262	HRFT223JCA	1/10 22K OHM J 2012				
R263	HRFT223JCA	1/10 22K OHM J 2012				
R278	HRFT163JCA	1/10 16K OHM J 2012				
R279	HRFT163JCA	1/10 16K OHM J 2012				
R280	HRFT241JCA	1/10 240K OHM J 2012				
R281	HRFT103JCA	1/10 10K OHM J 2012				
R302	HRFT112JCA	1/10 1.1K OHM J 2012	HRFT112JCA	1/10 1.1K OHM J 2012	HRFT122JCA	1/10 1.2K OHM J 2012
R306	HRFT272JCA	1/10 2.7K OHM J 2012	HRFT272JCA	1/10 2.7K OHM J 2012	HRFT242JCA	1/10 2.4K OHM J 2012
R327	HRFT681JCA	1/10 680 OHM J 2012	HRFT681JCA	1/10 680 OHM J 2012	HRFT561JCA	1/10 560 OHM J 2012
R401	HRFT242JCA	1/10 2.4K OHM J 2012	HRFT202JCA	1/10 2K OHM J 2012	HRFT152JCA	1/10 1.5K OHM J 2012
R403	HRFT471JCA	1/10 470 OHM J 2012	HRFT471JCA	1/10 470 OHM J 2012		
R405	HRFT102JCA	1/10 1K OHM J 2012	HRFT102JCA	1/10 1K OHM J 2012		
R451	HRFT132JCA	1/10 1.3K OHM J 2012				
R452	HRFT471JCA	1/10 470 OHM J 2012				
R453	HRFT473JCA	1/10 47K OHM J 2012				
R501	HRFT133JCA	1/10 13K OHM J 2012	HRFT133JCA	1/10 13K OHM J 2012	HRFT472JCA	1/10 4.7K OHM J 2012
C178	CEXF1H100A	50V RSM 10MF (5X7) TP				

	Hi-Fi		4HEAD		2HEAD	
LOC	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION
C252	CEXF1H100A	50V RSM 10MF (5X7) TP				
C253	CMXM2A223J	100V 0.022MF J TP				
C255	CMXM2A472J	100V 4700PF J (TP)				
C256	CEXF1A101A	10V RSM 100MF 6.3X7				
C257	CEXF1A101A	10V RSM 100MF 6.3X7				
C258	CMXM2A472J	100V 4700PF J (TP)				
C260	CMXM2A223J	100V 0.022MF J TP				
C261	CEXF1H100A	50V RSM 10MF (5X7) TP				
C262	CEXF1C470A	16V RSM 47MF (5X7) TP				
C263	CMXM2A223J	100V 0.022MF J TP				
C264	CEXF1C470A	16V RSM 47MF (5X7) TP				
C266	CEXF1C470A	16V RSM 47MF (5X7) TP				
C267	CEXF1A101A	10V RSM 100MF 6.3X7				
C268	CEXF1A101A	10V RSM 100MF 6.3X7				
C451	CEXF1C470A	16V RSM 47MF (5X7) TP				
C459	CEXF1H109A	50V RSM 1MF (4X7) TP				
C823	CEXF1H100A	50V RSM 10MF (5X7) TP				
C825	CEXF1H100A	50V RSM 10MF (5X7) TP				
L251	5CPX101J2T	100UH(BRN-BRN)				
L252	5CPX101J2T	100UH(BRN-BRN)				
L304	5CPX100J2T	10UH(BRN-BLK)	5CPX100J2T	10UH(BRN-BLK)	5CPX101J2T	100UH(BRN-BLK)
L451	5CPX100J2T	10UH(BRN-BLK)				
L813	56C220K686	22UH K 27.5X0.4D				
Q251	TZTA1266Y-	KTA1266Y-(AUTO)(1015Y)				
Q306	TZTC3198Y-	KTC3198Y-(1815Y)(AUTO)				
Q814	TZTA1273Y-	KTA1273Y(966Y)				
C231			CCZF1H104Z	50V HIKE 0.1MF Z	CCZF1H104Z	50V HIKE 0.1MF Z
C353	CBZP1C103M	16V Y5S 0.01MF M				
D251	DZN4148---	1N4148 AUTO 52MM				
D510	DZN4148---	1N4148 AUTO 52MM	DZN4148---	1N4148 AUTO 52MM		
D818	DZZ10BM---	UZ-10BM				
JP001			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP004			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP005			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP006			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP010	85801065GY	AWG22 1/0.65 TIN COATING				
JP013			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP021	85801065GY	AWG22 1/0.65 TIN COATING				
JP022			85801069GY	AWG22 1/0.65 TIN COATING	85801069GY	AWG22 1/0.65 TIN COATING
JP023	85801065GY	AWG22 1/0.65 TIN COATING				
JP034	85801065GY	AWG22 1/0.65 TIN COATING				
JP052	85801065GY	AWG22 1/0.65 TIN COATING				
JP083	85801065GY	AWG22 1/0.65 TIN COATING				
JP130	85801065GY	AWG22 1/0.65 TIN COATING				
JP132	85801065GY	AWG22 1/0.65 TIN COATING				
JP133	85801065GY	AWG22 1/0.65 TIN COATING				
JP134	85801065GY	AWG22 1/0.65 TIN COATING				
JP164	85801065GY	AWG22 1/0.65 TIN COATING				

	Hi-Fi		4HEAD		2HEAD	
LOC	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION
JP165	85801065GY	AWG22 1/0.65 TIN COATING				
JP175	85801065GY	AWG22 1/0.65 TIN COATING				
JP176	85801065GY	AWG22 1/0.65 TIN COATING				
JP205	85801065GY	AWG22 1/0.65 TIN COATING				
JP206	85801065GY	AWG22 1/0.65 TIN COATING				
JP207	85801065GY	AWG22 1/0.65 TIN COATING				
JP208	85801065GY	AWG22 1/0.65 TIN COATING				
JP209	85801065GY	AWG22 1/0.65 TIN COATING				
JP210	85801065GY	AWG22 1/0.65 TIN COATING				
JP211	85801065GY	AWG22 1/0.65 TIN COATING				
JP212	85801065GY	AWG22 1/0.65 TIN COATING				
JP213	85801065GY	AWG22 1/0.65 TIN COATING				
JP215	85801065GY	AWG22 1/0.65 TIN COATING				
JP216	85801065GY	AWG22 1/0.65 TIN COATING				
JP217	85801065GY	AWG22 1/0.65 TIN COATING				
JP218	85801065GY	AWG22 1/0.65 TIN COATING				
JP221	85801065GY	AWG22 1/0.65 TIN COATING				
JP230	85801065GY	AWG22 1/0.65 TIN COATING				
JP231	85801065GY	AWG22 1/0.65 TIN COATING				
JP236	85801065GY	AWG22 1/0.65 TIN COATING				
JP238	85801065GY	AWG22 1/0.65 TIN COATING				
JP239			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP241	85801065GY	AWG22 1/0.65 TIN COATING				
JP243			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP244	85801065GY	AWG22 1/0.65 TIN COATING				
JP260	85801065GY	AWG22 1/0.65 TIN COATING				
JP261	85801065GY	AWG22 1/0.65 TIN COATING				
JP266	85801065GY	AWG22 1/0.65 TIN COATING				
R202	RD-AZ123J-	1/6 12K OHM J	RD-AZ473J-	1/6 47K OHM J	RD-AZ473J-	1/6 47K OHM J
R209	RD-AZ103J-	1/6 10K OHM J				
R226	RD-AZ182J-	1/6 1.8K OHM J	RD-AZ122J-	1/6 1.2K OHM J-	RD-AZ122J-	1/6 1.2K OHM J-
R231			RD-AZ473J-	1/6 47K OHM J	RD-AZ473J-	1/6 47K OHM J
R232			RD-AZ512J-	1/6 5.1K OHM J-	RD-AZ512J-	1/6 5.1K OHM J-
R255	RD-AZ225J-	1/6 2.2M OHM J				
R264	RD-AZ562J-	1/6 5.6K OHM J				
R265	RD-AZ562J-	1/6 5.6K OHM J				
R268	RD-AZ562J-	1/6 5.6K OHM J				
R269	RD-AZ562J-	1/6 5.6K OHM J	RD-AZ561J-	1/6 560 OHM J	RD-AZ561J-	1/6 560 OHM J
R276	RD-AZ513J-	1/6 51K OHM J				
R277	RD-AZ513J-	1/6 51K OHM J				
R313	RD-AZ182J-	1/6 1.8K OHM J				
R314	RD-AZ222J-	1/6 2.2K OHM J				
R453	RD-AZ473J-	1/6 47K OHM J				
R582	RD-AZ101J-	1/6 100 OHM J				
R583	RD-AZ101J-	1/6 100 OHM J				
R584	RD-AZ101J-	1/6 100 OHM J				
R817	RD-2Z391J-	1/2 390 OHM J				
R818	RD-AZ152J-	1/6 1.5K OHM J				

	Hi-Fi		4HEAD		2HEAD	
LOC	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION
JK701	97P6311300	DSP-9407A				
JK71A	97P0973700	SUS304 CSP T0.15				
P703	97P6271300	00-8283-0511-00000				
C751	CXSL1H101J	50V SL 100PF J				
C752	CXSL1H101J	50V SL 100PF J				
D707	DZN4148---	1N4148 AUTO 52MM				
R751	RD-AZ102J-	1/6 1K OHM J				
R752	RD-AZ102J-	1/6 1K OHM J				
R753	RD-AZ750J-	1/6 75 OHM J				
IC121	1TDA9845--	TDA9845				
X121	5XE10R000C	HC-49/U 10.00000MHZ 20PPM				
Z121	5PSFE574MC	SFE 5.74MC				
C111	HCBK682KCA	50V X7R 6800PF K 2012	HRFT103JCA	1/10 10K OHM J 2012	HRFT103JCA	1/10 10K OHM J 2012
C122	HCBK103KCA	50V X7R 0.01MF K 2012				
C125	HCLK181JCA	50V SL 180PF J 2012				
C141	HCBK472KCA	50V X7R 4700PF K 2012	HCFK223ZCA	50V Y5V 0.022MF 2012	HCFK223ZCA	50V Y5V 0.022MF 2012
C161	HCLK181JCA	50V SL 180PF J 2012				
R117	HRFT471JCA	1/10 470 OHM J 2012	HRFT519JCA	1/10 5.1 OHM J 2012	HRFT519JCA	1/10 5.1 OHM J 2012
R122	HRFT273JCA	1/10 27K OHM J 2012				
R123	HRFT202JCA	1/10 2K OHM J 2012				
R127	HRFT472JCA	1/10 4.7K OHM J 2012				
R131	HRFT202JCA	1/10 2K OHM J 2012	HRFT332JCA	1/10 3.3K OHM J 2012	HRFT332JCA	1/10 3.3K OHM J 2012
R132	HRFT222JCA	1/10 2.2K OHM J 2012				
R133	HRFT105JCA	1/10 1M OHM J 2012				
R134	HRFT105JCA	1/10 1M OHM J 2012				
C121	CEXF1C470A	16V RSM 47MF (5X7) TP				
C123	CMXM2A104J	100V 0.1MF J (TP)				
C124	CMXM2A182J	100V 1800PF1 J (TP)				
C126	CEXF1H229A	50V RSM 2.2MF (4X7) TP				
C127	CEXF1H229A	50V RSM 2.2MF (4X7) TP				
C128	CEXF1H229A	50V RSM 2.2MF (4X7) TP				
C129	CEXF1H229A	50V RSM 2.2MF (4X7) TP				
C130	CEXF1H229A	50V RSM 2.2MF (4X7) TP				
C131	CMXM2A103J	100V 0.01MF J (TP)				
C132	CMXM2A103J	100V 0.01MF J (TP)				
C133	CEXF1A101A	10V RSM 100MF 6.3X7				
C134	CEXF1E220A	25V RSM 22MF 6.3X7				
C135	CMXM2A103J	100V 0.01MF J (TP)				
C136	CEXF1H100A	50V RSM 10MF (5X7) TP				
C142			CEXF1H229A	50V RSM 2.2MF (4X7) TP	CEXF1H229A	50V RSM 2.2MF (4X7) TP
L121	5CPX472J--	4700UH 5MM J RADIAL				
Q121	TZRC104M--	KRC104M AUTO				
JP06			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP08			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP09			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP11	85801065GY	AWG22 1/0.65 TIN COATING				
JP13			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
JP19	85801065GY	AWG22 1/0.65 TIN COATING				

	Hi-Fi		4HEAD		2HEAD	
LOC	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION	PART CODE	DESCRIPTION
JP20	85801065GY	AWG22 1/0.65 TIN COATING				
JP34			85801065GY	AWG22 1/0.65 TIN COATING	85801065GY	AWG22 1/0.65 TIN COATING
R112	RD-AZ152J-	1/6 1.5K OHM J	RD-AZ103J-	1/6 10K OHM J	RD-AZ103J-	1/6 10K OHM J
R121	RD-AZ273J-	1/6 27K OHM J				
R124	RD-AZ471J-	1/6 470 OHM J				
R125	RD-AZ222J-	1/6 2.2K OHM J				
R126	RD-AZ103J-	1/6 10K OHM J				
R130	RD-AZ431J-	1/6 430 OHM J				

13-2. TABLE OF DIFFERENT PART LIST FOR PCB LOGIC AS

MODEL			K424W K224W	K464W K264W	K8K4W	K444W K244W	K404W K204W	K4A4W K2A4W	K4B4W K2B4W
LOC	NAME	PART CODE							
SW701~ SW708	SW TACK	5S50101Z90	O	X	O	X	O	X	O
SW709~ SW716	SW TACK	5S50101Z90	X	O	X	O	X	O	X
C703	C CERA	CXSL1H470J	O	O	O	X	X	O	O
C704	C CERA	CXSL1H470J	O	O	O	X	X	O	O
JP	WIRE COPPER	85801065GY	JP701~ JP727	JP701~ JP727	JP701~ JP728	JP701~ JP726	JP701~ JP726	JP701~ JP732	JP701~ JP721
R702	R CARBON FILM	RD-AZ510J-	O	O	O	X	X	O	O
R703		RD-AZ510J-	O	O	O	X	X	O	O
U701	PCB LOGIC		97P65184LA	97P65184LA	97P65201LA	97P65155LA	97P65155LA	97P65172LA	97P65171LA

13-3. HI-FI/MONO OPTION FOR LOGIC AS

LOCATION	NAME	PART CODE	Hi-Fi	MONO
JK701	JACK PIN	97P6311300	O	X
JK71A	PLATE EARTH AV	97P0973700	O	X
C751~C752	C CERA	CXSL1H101J	O	X
D707	DIODE	DZN4148---	O	X
R751~R752	R CARBON FILM	RD-AZ102J-	O	X
R753	R CARBON FILM	RD-AZ750J-	O	X
P703	CONN WAFER	97P6271300	O	X

13-4. A/V JACK OPTION (PHONO-ONE SCART)

LOC. \ JACK	PHONO		SCART	REMARKS
BA03 BOARD ANT	Hi-Fi	97P0718400 HI-PS (HB): 6PIN	97P0716900 HI-PS (HB)	
	MONO	97P0717100 HI-PS (HB): 4PIN		
C602 C ELECTRO	Hi-Fi	CEXFIH 100A 50V RSM 10MF (5X7) TP	CEXFIH100A 50V RSM 10MF (5X7) TP	PIF PART
	MONO	–		
C603 C CHIP CERA	Hi-Fi	HCLK 471JCA 50V SL 470PF J 2012	HCLK471JCA 50V SL 470PF J 2012	PIF PART
	MONO	–		
C606 C ELECTRO	Hi-Fi	CEXF1H100A 50V RSM 10MF (5X7) TP	CEXF1H100A 50V RSM 10MF (5X7) TP	PIF PART
	MONO	–		
C607 C CHIP CERA	Hi-Fi	HCLK 471JCA 50V SL 470PF J 2012	HCLK471JCA 50V SL 470PF J 20/2	PIF PART
	MONO	–		
D615 D10DE	–		DZN4148 – – – 1N4148 AUTO 52MM	PIF PART
JK601 JACK PIN	Hi-Fi	97P6313700 DPAM-9639 (6PIN)	–	
	MONO	97P6313600 DPAM-9640 (4PIN)		
JK602 JACK SCART	–		97P6313400 DSAM-9622	
JP256 WIRE COPPER	–		85801065GY AWG22 1/0.65 TIN COATING	
JP269 WIRE COPPER	85801065GY AWG22 1/0.65 TIN COATING		–	
JP270 WIRE COPPER	85801065GY AWG22 1/0.65 TIN COATING		–	
JP280 WIRE COPPER	–		85801065GY AWG22 1/0.65 TIN COATING	
Q601 TR	TZTA1273Y- KTA 1273Y (966Y)		–	PIF PART
Q602 TR	–		TZRC 101M – – KRC101M (AUTO) (1201)	PIF PART
RJ045 R CHIP	HRF8000-EA 1/8 ø OHM 3216		–	
R161 R CARBON FILM	RD-AZ399J- 1/6 3.9 OHM J		–	
R173 R CARBON FILM	–		RD-AZ399J- 1/6 3.9 OHM J	

JACK / LOC.	PHONO		SCART	REMARKS
R603 R CARBON FILM	Hi-Fi	RD-AZ102J- 1/6 1K OHM J	RD-AZ102J- 1/6 1K OHM J	PIF PART
	MONO	–		
R605 R CARBON FILM	Hi-Fi	RD-AZ331J- 1/6 330 OHM J	RD-AZ331J- 1/6 330 OHM J	PIF PART
	MONO	–		
R621 R CARBON FILM	RD-AZ332J- 1/6 3.3K OHM J		RD-AZ202J- 1/6 2K OHM J	PIF PART
R622 R CHIP	HRFT222JCA 1/10 2.2K OHM J 2012		–	PIF PART
R660 R CARBON FILM	–		RD-AZ202J- 1/6 2K OHM J	PIF PART
D701 DIODE	–		DZN4148 – – – 1N4148 AUTO 52MM	LOGIC
D707 DIODE	–		DZN4148 – – – 1N4148 AUTO 52MM	LOGIC

13-5. RF OUTPUT (PHONO-ONE SCART)

	PHONO	SCART
DEFAULT	BG	DK

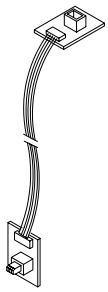
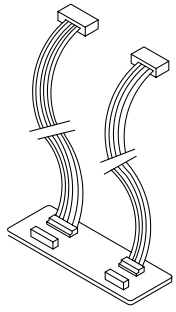
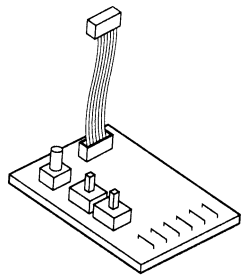
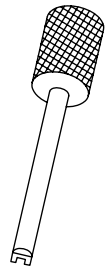
13-6. U-COM VERSION

	O VERSION	1st
IC501	168KKVZGTS	168KK8ZMTS

SECTION 14. SERVICE JIG CONNECTION METHODS

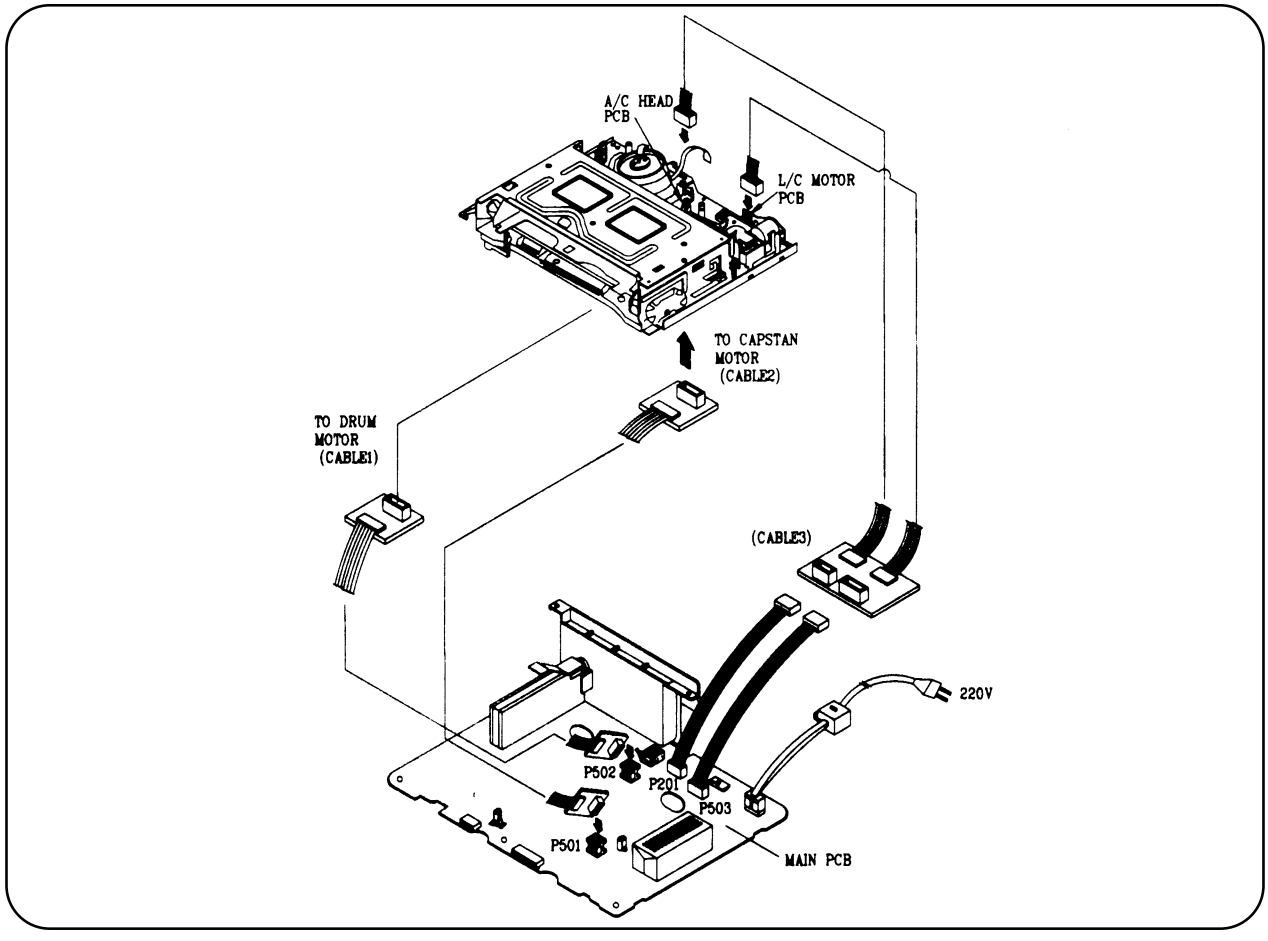
THE SERVICE FIXTURE

FIXTURE ITEM	DESCRIPTION	P/N
Extension Cable 1	Use for K mecha Drum Motor Connection Cable	97PB400100
Extension Cable 2	Use for K mecha Capstan Motor Connection Cable	97PB400200
Extension Cable 3	Use for K mecha A/C head and L/C Motor Connection Cable	97PB400300
Path Adj Fixture	Use for X-position adjust Tape path alignment	97PB396000
Special Driver	Use for X-position adjust Tape path alignment	

Cable 1	Cable 2	Cable 3	Path Adj Fixture	Special Driver
				

NOTE: If cable 1, cable 2 and cable3 are not available, you can do a repair by selecting No 2. EE MODE WITHOUT DECK MODE and No 3. ERROR CHECK MODE in SVC MODE FOR REPAIR as the same effect without those (See page 61).

EXTENSION CABLE CONNECTION



NOTE: How to executing the unit in the service mode

1) Press the [MENU] button to go to [MAIN MENU] screen and press the number 484 in sequence then go to [SERVICE MODE] screen.
2) Press the number 1 button to call the [SVC MODE FOR REPAIR] screen.
3) Press the number 1 button to call the [DECK JIG CONNECTION MODE(ON)].

PATH FIXTURE CONNECTION/TEST POINT IDENTIFICATION

Refer to the adjustment of the tape transporting system